

DELHI UNIVERSITY LIBRARY

DELHI UNIVERSITY LIBRARY

CI NO. V672:71 +18

Date of release for loan

Ac. No. 156 900
This book should be returned on or before the date last stamped below An overdue charge of Six nP, will be charged for each day the book is kept overtime.

NUBIAN TREASURE

NUBIAN TREASURE

An Account of the Discoveries at Ballana and Qustul

by

WALTER B. EMERY

M.B.E., M.A., F.S.A.

Director of Excavations at North Sakkara
Formerly Director of the Archæological Survey of Nubia
Egyptian Government Service of Antiquities

With 48 Plates
and 10 Maps and Plans in the text



METHUEN & CO. LTD., LONDON 36 Essex Street, Strand, W.C.2

GATALOGUE NO 3984/U

THIS BOOK IS PRODUCED IN COMPLETE CONFORMITY WITH THE AUTHORISED ECONOMY STANDARDS

Printed in Great Britain by The Camelot Press Ltd , London and Southampton

DEDICATED TO

MY COLLEAGUES OF THE ARCHÆOLOGICAL SURVEY OF NUBIA

L. P. KIRWAN
ZAKI YUSEF SAAD
RITZGALLAH NEGUIB MACRAMALLAH
ABDEL BAKI YUSEF
ABDEL MONEIM
AHMED EL-BATRAWI
MOHAMMED HUSNI
MOHAMMED HASSENEIN



PREFACE

THIS book is not in any way intended for the archæologist, or even for the amateur in archæological research, for it has been written entirely for the layman who may have an interest in ancient history and the materials of which it is made. Many archæologists are inclined to look askance at the rather wide publicity that the modern Press sometimes gives to even minor discoveries of the excavator, and I must admit that the sensationalism which sometimes accompanies the most straightforward reports is really rather shocking and is often a source of considerable embarrassment to the wretched discoverer. Nevertheless, I feel that the effects of the Press to gain information of the new discoveries in the archæological field is merely a sign of the growing interest of the public in history and the lessons it can teach us. Admittedly there is a natural enthusiasm for treasure-hunting, and the discovery with which this book deals-kings buried with their jewelled regalia, etc.—came in for more than its fair share of publicity at the time. But the public's interest goes far beyond that, and I feel that some attempt should be made to satisfy this interest. Hence this book.

The results of excavations are usually published in scientific reports written for the specialist, and even for him they are, for the most part, intended as works of reference. The new information published in these excavation reports is periodically gathered by the historian and ultimately appears in some study which may or may not reach the mass of the reading public. Archæology and history thus remain, to a 'arge extent, the interest of a few, and I feel that the science has little right to existence unless its fruits are made easily accessible to the layman, who, although he may not have the time for detailed study, is certainly entitled to share in the fascination that the records of the past undoubtedly give.

This, then, is a short account, for the layman, of at least one of the more recent archæological discoveries that are yearly contributing to the records of human history. I have not attempted to give scientific references or arguments, avoiding as far as possible all debatable points. It is not possible within the compass of a book of this character to give a detailed description of all the objects discovered at Ballana and Qustul; I have therefore confined myself to a small but representative selection, and have preferred to depend more on the illustrations than on written description.

I wish to express my thanks to the Director-General of the Service of Antiquities for his permission to reproduce photographs originally published in my official report on these excavations.

WALTER B. EMERY

CONTENTS

Chapter I	Page
THE RAISING OF THE ASWAN DAM AND THE WORK OF THE ARCHÆVOLOGICAL SURVEY	I
Chapter II	
LOWER NUBIA. THE LAND AND THE PEOPLE	5
Chapter III	
HISTORICAL OUTLINE OF NUBIA FROM THE EARLIEST TIMES TO THE X-GROUP PERIOD	18
Chapter IV	
HISTORY OF NUBIA DURING THE X-GROUP PERIOD	26
Chapter V	
THE DISCOVERY	33
Chapter VI	
THE TOMBS OF QUSTUL	44
Chapter VII	
THE TOMBS OF BALLANA	57

ILLUSTRATIONS

PLATES AT END

- I. STAFF AND WORKMEN OF THE EXPEDITION
- 2. THE DAHABIEH "ZINET-EL-NIL"
- 3. VIEWS OF THE TUMULI OF BALLANA AND QUSTUL
- 4. A. THE TUMULUS OF TOMB 14 AT QUSTUL
 - B. INTERIOR OF TOMB 2 AT QUISTUL
 - C. SACRIFICED HORSES IN TOMB 2 AT QUSTUL
- 5. A. THE PIT OF TOMB 3 AT QUSTUL
 - B. INTERIOR OF TOMB 3 AT QUSTUL
- A. FORECOURT OF TOMB 3 AT QUSTUL
 B AND C. OBJECTS IN TOMB 3 AT QUSTUL
- 7. EXCAVATION AT BALLANA
- 8. DISCOVERIES IN THE QUSTUL TOMBS
- 9. DISCOVERIES IN TOMBS 3 AND 80 AT BALLANA
- 10. DISCOVERIES IN TOMBS 95 AND 121 AT BALLANA
- 11. DISCOVERIES IN TOMBS 9 AND 114 AT BALLANA
- 12. JEWELLED CROWN FROM TOMB 80 AT BALLANA
- 13. JEWELLED CROWNS FROM TOMBS 6 AND 118 AT BALLANA
- 14. JEWELLED CROWN FROM TOMB 114 AT BALLANA
- 15. JEWELLED CROWNS FROM TOMBS 47 AND 80 AT BALLANA
- 16. JEWELLED CROWN FROM TOMB 95 AT BALLANA
- 17. SILVER BRACELETS FROM TOMBS 6 AND 47 AT BALLANA
- 18. SILVER NECKLACES FROM TOMB 47 AT BALLANA
- 19. BEAD NECKLACES FROM TOMBS 47, 73, 121 AND 122 AT BALLANA
- 20. MISCELLANEOUS GOLD AND SILVER JEWELLERY FROM BALLANA
 AND OUSTUL
- 21. MISCELLANEOUS SILVER JEWELLERY FOUND AT BALLANA AND QUSTUL
- 22. SILVER VESSELS, ETC., FOUND AT BALLANA
- 23. SILVER YESSELS FOUND AT BALLANA AND QUSTUL
- 24. SILVER VESSELS FOUND AT BALLANA AND QUSTUL
- 25. SILVER VESSELS FOUND AT BALLANA
- 26. HORSE EQUIPMENT FROM QUSTUL EXHIBITED IN THE CAIRO MUSEUM
- 27. SILVER HORSE TRAPPINGS AND SADDLE FITTINGS

- 28. SILVER BRIDLES FOUND AT QUSTUL
- 2Q. DETAILS OF SILVER HEAD-STALL, ETC.
- 30. JEWELLED HORSE COLLAR FOUND AT QUSTUL
- 31. SILVER HORSE BIT AND SILVER PLAQUES FROM QUSTUL
- 32. GAMES FOUND IN TOMB 3 AT QUITUL
- 33. SILVER MOUNTED SPEARS FROM BALLANA
- 34. ARCHER'S SILVER BRACER AND FINGER LOOSES FROM BALLANA
- 35. SWORD, ARROW QUIVER AND SHIELD FROM BALLANA AND QUSTUL
- 36. TOILET IMPLEMENTS, ETC., FROM BALLANA AND QUSTUL
- 37. BRONZE STANDARD LAMPS, ETC., FROM BALLANA AND QUSTUL
- 38. BRONZE STANDARD LAMPS FROM BALLANA
- 39. BRONZE STANDARD LAMPS FROM BALLANA
- 40. BRONZE LAMP, SILVER SPOON AND IRON KNIFE FROM BALLANA AND QUSTUL
- 41. BRONZE MINIATURE TABLES FROM BALLANA
- 42. BRONZE CENSERS AND SCALES FROM BALLANA
- 43. BRONZE FOLDING TABLE STAND AND IRON FOLDING CHAIR FROM BALLANA
- 44. DECORATED BRONZE BOWL FROM BALLANA
- 45. BRONZE VESSELS FROM BALLANA
- 46. BRONZE VESSELS FROM BALLANA
- 47. BRONZE CASKET AND BRONZE FLAGON FROM BALLANA
- 48. IVORY INLAID WOODEN CHEST FROM QUSTUL

TEXT ILLUSTRATIONS

F_{ig} .		page
I.	SKETCH MAP OF EGYPT AND LOWER NUBIA	6
2.	SKETCH PLAN OF TOMB 3 AT QUSTUL	45
3.	SKETCH PLAN OF TOMB 14 AT QUSTUL	51
4.	SKETCH PLAN OF TOMB 31 AT QUSTUL	. 54
5.	SKETCH PLAN OF TOMB 36 AT QUSTUL	56
6.	SKETCH PLAN OF TOMB 47 AT BALLANA	57
7.	sketch plan of tomb 80 at ballana	61
8.	SKETCH PLAN OF TOMB 95 AT BALLANA	67
9.	SKETCH PLAN OF TOMB 114 AT BALLANA	69
IO.	SKETCH PLAN OF TOMB 118 AT BALLANA	71

CHAPTER I

THE RAISING OF THE ASWAN DAM AND THE WORK OF THE ARCHÆOLOGICAL SURVEY

EGYPTOLOGY has good reason to be grateful for the construction of the great dam across the First Cataract at Aswan, for were it not for the Dam little would be known of the archæology of Ancient Nubia, that battleground of the white and black races from time immemorial. Furthermore, the Cairo Museum would not have been enriched, as it has been, with the Nubian Collection, so valuable to the student of Egypt's great past.

At the beginning of this century Egypt's need for an increased supply of water for her cotton crop resulted in the proposal to build a dam across the First Cataract which would control the flow of the Nile, storing water in November and December, when there is a surplus, to be discharged in May, June and July, when the cultivated areas need a supply which the natural flow of the river cannot give. The construction of the Dam, which was completed in 1902, therefore entailed the submersion of a large part of northern Nubia which was turned into a gigantic reservoir for a considerable period of the year. The project was accomplished and met with such success that in 1907 it was decided to increase the height of the Dam, and thus further large areas between Shellal and Wadi es Sebua were submerged.

The submersion of the beautiful Temple of Philæ horrified many Egyptologists, but the destruction of much of its beauty was amply compensated for by the decision of the Egyptian Government to send an expedition to record and excavate all ancient sites in the threatened areas. Owing to the immediate lack of necessity and the greatness of the task, such a systematic archæological survey has never been attempted in Egypt and it therefore happens that, through the building of the Aswan Dam, Egyptology has benefited by the more or less complete exploration of at least one part of the Nile Valley.

The direction of this archæological exploration was placed first in the hands of Dr. George Reisner, and later Mr. Cecil M. Firth, who finally completed the excavation of all ancient sites as far south as Wadi es Sebua by March, 1911, when the work on the Dam was finished. Although many Egyptologists had hoped that this systematic exploration would continue to the Second Cataract, further credits for the work were not forthcoming, as the area south of Es Sebua was not in any way threatened. Although no spectacular discoveries were made during this work, a scund foundation was laid for our knowledge of Ancient Nubia which amply repaid the time and money expended on the project.

In 1929 it was again decided to raise the level of the Aswan Dam, an undertaking which would result in the submerging of the southern area of Lower Nubia, from Wadi es Sebua to Adindan on the Sudan frontier. Credits were again granted by the Egyptian Government to the Antiquities Department to reopen the work of the Archæological Survey. I was appointed director of the expedition. Mr. L. P. Kirwan was appointed sub-director and in addition I had the able assistance of Neguib Macramallah Effendi, Abdel Baki Effendi, and Abdel Moneim Effendi. who had just taken their diplomas at the Fouad the First University at Cairo. At the end of three years Macramallah Effendi had to leave us to take up his duties at Sakkara, and he was replaced by Zaki Yusef Saad Effendi. who was with us when the great finds at Ballana and Qustul were made. The rest of my staff consisted of Dr. Ahmed Batrawi as anatomist, Mohammed Husni Effendi as surveyor, and Mohammed Hassenein Effendi as clerk of works. We were accompanied by a gang of one hundred and fifty workmen (later increased to four hundred), from the villages of Guft, north of Luxor, all of whom were experts in work of this description. It is usual when excavating in Egypt to employ these expert workmen of Guft only as gang leaders, depending on the local inhabitants for the mass of labourers. But as the Nubian is quite useless for work of this kind we were compelled to bring all our men from Egypt. Excavation in Nubia therefore entails considerable expense, especially in transport, each man costing us $f_{,2}$ on this score alone. In addition to this there was the cost of transferring the men's bread, a factor which assumed almost unbelievable proportions, for it is surprising how much bread one man can eat in six months. This bread is made by the wives of the workmen in Egypt, and is dried in the sun until it attains an almost bricklike hardness before it is packed in sacks for transport. As the consumer requires it, he soaks it in water to make it edible.

Three distinct seasons' work were planned for the six winter months of 1929, 1930 and 1931, in which time it was considered possible to explore the whole area. Work of this description cannot usually be undertaken in Nubia during the summer owing to the intense heat.

As all the threatened areas were well within reach of the river, and also because fairly rapid movement was essential, it was found necessary to employ the services of two sailing dahabiehs (passenger boats) for the accommodation of the staff. Two well-equipped vessels were accordingly chartered from Thos. Cook and Son, named the "Zinet-el-Nil" and the "Thames," each with a crew of fourteen Nubian sailors. I feel sure that few archæological expeditions have enjoyed the comforts that our habitation on these ships gave us. Owing to the urge for speed in modern travel, the sailing dahabieh is now almost a thing of the past, and the sight of one of these magnificent vessels on the Nile is a comparatively rare occurrence. Nevertheless, for the exploring archæologist they undoubtedly form the best method of travel, and with this fact in view, on the completion of the

Nubian Survey I purchased the "Zinet-el-Nil," and, apart from utilising her as my home in Egypt before the War, I found her most useful in exploring little-known and rather inaccessible sites. For the benefit of readers who are perhaps unacquainted with vessels of this type, a description of the "Zinet-el-Nil" would not be out of place (Plate 2).

She has a shallow, flat-bottomed hull of iron, measuring 112 feet in length, and 19 feet in breadth. The mainmast is situated near the prow, and a small mizzenmast right at the stern. The sails are of the lateen type, that on the foremast being 130 feet in length and that on the mizzen 60 feet. In addition to her sails, the ship can also be propelled in calm weather by great 30 foot sweeps, which are worked from rowing pits in the foredeck. These rowing pits have lockers, etc., on each side of them which form storage accommodation for the crew, who number in all fourteen men. The passenger accommodation occupies the after part of the vessel and consists of a large saloon, one big double cabin, four single cabins, two w.cs., bathroom, servants' cabin and pantry. On each side of the entrance door to the passengers' quarters are two stairways, which lead to an upper deck reserved for them. The galley is situated in front of the foremast and is thus entirely separated from the living quarters. Each cabin is equipped with running water, which is pumped up from the river, and, passing through an elaborate filter system, is stored in tanks on the upper deck. Such in brief is the arrangement of the "Zinet-el-Nil"; the second vessel, the "Thames," was of a similar design, although much smaller.

As I have said before, it is rare that an archæological expedition can have such luxurious headquarters, but its advantages were certainly counterbalanced by the food question. Nubia barely supplies food for its inhabitants; vegetables being extremely scarce, we had to depend largely on the tinned variety which we brought with us from Cairo at the commencement of each season's work. During its short period of pleasure oruises Cook's steamer "Thebes" often let us have fresh vegetables as it passed us, and later, as we progressed south, the Sudan Government kindly allowed their steamers to bring us supplies on occasion from Wadi Halfa. With regard to meat, we were largely dependent on our workmen, for they frequently joined together and bought an ox, sheep or goat; on these occasions we were able to purchase the limited quantities that our small staff needed. We endeavoured sometimes to vary our rather monotonous menu with Nile fish, but our sailors were not particularly successful as fishermen, and, moreover, it takes a first-class Cairo chef to make the average river fish palatable. Our main standby consisted of lentils and potatoes brought from Cairo, and eggs and pigeons, which we could get in Nubia. Apart from the vast quantities of pigeons that we consumed I hate to think of the innumerable tins of bully beef, served in a variety of fashions, that we were compelled to eat!

Our workmen lived under canvas, and a gyassa (sailing cargo boat) was used for the transport of their tents, food, etc., as we moved slowly south,

excavating every ancient site in our path. Cemeteries of almost every period were discovered, ranging in date from about 3500 B.C. to A.D. 500. and each had to be excavated and recorded in detail. The usual procedure was as follows: while the two dahabiehs and the gyassa moved slowly up the river with our equipment, etc., we advanced in extended order across the desert near the river bank, noting any signs of ancient remains. When once a site was discovered a preliminary excavation was undertaken to ascertain its value and period, and when these tests proved satisfactory the boats were stopped, the workmen's camp erected, and the systematic clearance commenced. Only our most skilled workmen cleared the filling of the graves, disclosing but not moving any of the contents. The grave was then numbered and photographed, after which the archæologist took charge. First of all he made a drawing to a scale of 1/25 of the grave and its contents on a numbered card, adding notes on all features of interest. He was then joined by the anatomist, who examined the body of the owner of the grave, taking notes of the sex, age, measurements, etc. When this work was finished the archæologist removed the objects, drawing them on his card to a scale of 1/5, and numbering them to correspond with the numerals marked on his original sketch of the grave and its contents in situ. The orientation of the grave was then taken, and the objects and anatomical specimens removed to the dahabiehs. On the completion of the excavation the surveyor marked the position of each grave, and planned the exact site of the cemetery on his map. When the photographs were printed they were attached to the cards of the archæologist and filed, thus giving us a detailed record to be incorporated in the future publication of our work.

The evenings were spent in examining, cleaning, and classifying the objects found during the day and in writing up a log book which contained our general observations. Such in outline was our daily work during the first two season's work in Nubia, until 1931, when we reached Abu Simbel, some fifteen miles north of the Sudan frontier, the limit of our exploration.

The results of these first two seasons, although amply repaying our labours, nevertheless yielded comparatively little to add to our knowledge, and were largely a repetition of the results obtained by Reisner and Firth further north. But with our third expedition at the end of 1931 our luck changed and at Ballana and Qustul, a few miles south of Abu Simbel, we discovered the tombs of the X-group kings and nobility, described in this book.

CHAPTER II

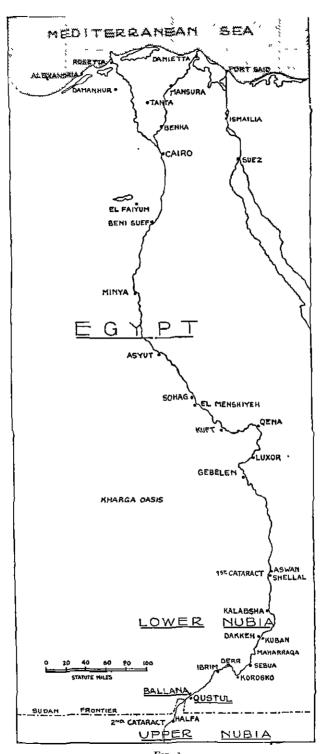
LOWER NUBIA. THE LAND AND THE PEOPLE

OWER NUBIA, known to the ancient Egyptians as Wawat, to the Greeks and Romans as Ethiopia, and to the modern Egyptians as Bilad el Barabra, is the area on each side of the Nile between Aswan and Wadi Halfa (Fig. 1). Its natural frontiers are the First and Second Cataracts, and thus the whole of the country lies within the political boundaries of Egypt, with the exception of a small area in the south between Adindan and Halfa which has been placed under the administration of the Sudan Government. Although politically a part of Egypt, to the Egyptians it is in many respects a foreign land, for the natural boundary of their country, both geographically and racially, is at the First Cataract at Aswan.

Unlike Egypt, it has not developed to any marked extent, and Lower Nubia, prior to the raising of the Aswan Dam, has always remained more or less a backwater of the constant-changing civilisation of the northern Nile valley. Even to-day it remains as it always has been, a barren highway between the fertile lands of Egypt and the Sudan, and as Sudan Government and tourist steamers pass up and down the Nile between Shellal and Halfa, life in this ancient country continues unchanged, with a steady adherence to old customs and traditions long since forgotten in the north.

Nubia was an almost unknown field, even to the archæologist, before the commencement of the Archæological Survey because of the great cost of travel and transport, and the modern excavator can only envy the early explorers who were not faced by any such difficulties. When John Lewis Burckhardt, the famous Swiss traveller, visited the country in 1813 he purchased two camels for the sum of £22, and with eight Spanish dollars in his pocket he undertook a journey 450 miles up the Nile from Aswan. Not only did he accomplish his considerable task successfully, but he also returned with three of his eight Spanish dollars, his total expenses having proved to be the equivalent of £1 15s.

One fact which is bound to strike the visitor to Lower Nubia is the complete difference of the landscape from that of Egypt; no longer does he see the great limestone plateaux bounding the wide green cultivation on each side of the river. He finds the river bounded almost directly on each bank with rugged granite and sandstone cliffs, with flat plains of bright yellow drift sand, interrupted at rare intervals by narrow strips of cultivation and groups of palm, tamarisk and castor-oil trees. Only the constant irrigation by the sakya and shaduf make these limited areas productive, and during our exploration we noted areas of what was once arable land lying



fallow, and covered by drift sand, because its cultivation did not repay the farmer for the great labour entailed in the production of an adequate supply of water. Perhaps the best way in which I can describe Lower Nubia is by taking my readers on an imaginary voyage up the Nile from Shellal to Wadi Halfa.

Tust south of Aswan is Shellal, our starting point, and also the terminus of the Egyptian State Railways; it consists of a scattered village surrounded by high granite cliffs, burnt almost black by the sun. Protected from the desert winds by these cliffs, this area is one of the hottest and most airless in all Nubia, attaining, as it does in summer, a temperature of frequently over 120° F. Shellal lies directly south of the First Cataract, and the river at this point is wide and dotted with rocky islands, the most beautiful of which is Philæ, on which stands the famous Temple of Isis. The cliffs are marked here and there with ancient quarrying and bear numerous inscriptions dating from early Pharaonic times down to the Christian era. As we progress south the scenery alters little, with the exception of narrow strips of cultivation near Gudhi, where the river bends towards the west, returning to a southerly direction as we reach Debod, a large typical Nubian village of whitewashed mud-brick houses with barrel-vaulted roofs. There is something very attractive about the clean, orderly Nubian villages in comparison with their rather untidy counterparts in Egypt. Curiously enough, this feature is largely due to Egyptian influence, for most of the Nubian menfolk spend the greater part of their lives as servants in the large towns of Egypt, and are undoubtedly influenced by ideas of orderliness and cleanliness. At Debod we see another ancient temple which was built by one of the Meroitic kings, Arg-Amen, and added to by Ptolemy VII (146 B.C.). After Debod we sail on towards Gertasse, passing numerous villages and narrow strips of cultivation with groves of palm trees, particularly on the east bank. The green of this limited arable land is brought into high relief by the blackened granite rocks and forms a coloured panorama that only Nubia can produce.

At Gertasse is another ancient temple, and the remains of a Roman fort. In this area the geological formation of Nubia changes; the granite rocks give place to sandstone, which is also darkened by the sun. Behind the temple at Gertasse are extensive sandstone quarries which supplied the stone for the Temple of Isis at Philæ.

South of Gertasse the valley narrows and the great cliffs converge close to the river until we reach Tafa, which was the ancient Taphis, a town of considerable importance in ancient times, for it guarded the famous pass of Kalabsha, which is situated just to the south of it. Apart from a small Roman temple, there are numerous ruins which suggest a fortified camp, perhaps a relic of the wars between the Romans and the Blemyes, for the latter occupied the town from A.D. 300 until their destruction by the Nobatæ in the sixth century.

Just south of Tafa, the Bab el Kalabsha presents what is perhaps one of

the most impressive sights in Nubia. A great natural gateway across the river is formed by the towering cliffs which converge on both banks, and the presence of numerous rocky islands suggests that originally the river passed through a cataract at this point. It is only when one sees such rock formations as these that one realises why the Nile is the only means of heavy transport in Nubia; even the footpaths from village to village have to leave their usual route by the river at such impassable barriers. South of this great gorge we reach Kalabsha, the ancient Talmis, and nearby on the west bank are two temples, one known as Kalabsha Temple, which was built during the reign of the Roman Emperor Augustus, and the other known as the Beit-el-Wali, which was founded by the Pharaoh Rameses II. On the walls of the Temple of Augustus is the famous inscription of Silko. King of the Nobatæ, in which he records the final defeat of the Blemves (see Chapter IV.) Five miles to the south of Kalabsha we sail over low rapids, known as the Bab Abu Hor, which are situated directly under the Tropic of Cancer. On the east bank the cliffs rise precipitously near the river and there is little cultivation.

A few miles further, on the east bank, is the village of Dendur, noted for a small temple built by Augustus on the opposite side of the river. As we near the village of Mariya, about fifty miles south of Shellal, we notice that the scenery becomes less rugged, soon to be followed by a wide area of cultivation on the east bank at Girsha. Here at Girsha are the ruins of the famous fortress town of Sabagura, belonging to the Byzantine period, which was excavated by the first Archæological Survey in 1908.

Nearly opposite, on the west bank, is the rock temple of Gerf Hussein which was built by Setaw, Viceroy of Nubia under Rameses II. As we pass south, we note that the west bank continues to be largely cultivated, while the east bank remains more or less barren, and this rather monotonous landscape continues until we reach Koshtamna, where it is broken by high cliffs on the east side of the Nile. Opposite Koshtamna is the large brickbuilt fortress of Ikkur, constructed during the Middle Kingdom (about 1950 B.C.), and completely excavated by the first Archæological Survey in 1908. Navigation at this point of the river is usually slow owing to extensive rocks and sandbanks. South of the fortress the desert edge of pebble terraces and sand recedes from the vicinity of the river, and a wide area of arable land surrounds the village of Dakkeh on the west bank, which marks the site of the ancient Pselchis. It was here that the Meroitic armies of the south were defeated by the Roman general Petronius in 23 B.C. Near the river edge is the famous temple built by the Meroitic King Arq-Amen, later added to by Ptolemy IV. During the period of the flood this building is marooned on a small island presenting one of Nubia's most picturesque sights.

But if I may digress, our appreciation of the beauties of Dakkeh were considerably lessened, for it was here, during our second expedition, that we had a most unpleasant experience. We had completed the excavation of the fortress of Kuban on the east bank, and late one afternoon we crossed the river and moored the dahabieh against the island which forms round the temple when the water rises after the closing of the Aswan Dam. Day by day the island becomes smaller, until finally it disappears, leaving only the upper part of the temple above water. However, this did not deter us from mooring there, as we expected to stay only a few days and would leave long before the island disappeared. What we did not realise was that thousands of small rats and frogs had made their home on the island, for they had been driven up to the higher ground by the rising water. We first noticed their presence when we were returning from a visit to the temple shortly before sundown, but, though we noticed hundreds of them in the underbrush, we hardly anticipated the attack on our boat which took place that night. The rats came over the gang planks and mooring ropes and in a very short time we had considerable additions to the ship's company, many of whom stayed with us for weeks. When we realised the danger, of course, we pushed off and returned to the east bank of the river, but for the next few days it was a common experience to find large portions of the curtains and upholstery in the saloon eaten away in the night. Bit by bit, with poison and traps, we cleared our unwelcome guests from the living quarters of the boat, but in the hold and between the upper and lower decks they held undisputed sway, making the nights almost unbearable with their squeakings and scratchings. During the whole of that season we were never entirely rid of them, and, needless to say, we never repeated the experiment of mooring against an island during a rising Nile.

Opposite the temple on the east bank is the great fortress of Kuban, which stands on the edge of an arid plain with little or no cultivation to relieve the monotonous landscape; a little further to the south is the great Wadi el Alaqi, which leads to the ancient gold mines and caravan road to the Sudan. Hence the fortress built for the protection of these routes during the early Middle Kingdom (about 1950 B.C.). We excavated the building in 1930 and found many features of interest, for it proved to be in better preservation than any other structure of its type and date either in Nubia or Egypt. After Dakkeh the line of cultivation continues down the west bank of the river, but the east bank remains arid and the monotony is not broken until we reach a large, well-cultivated island named Geziret Qurta. A little further south is the small temple of Ofendineh, built during the late Roman period; this marks the site of the ancient town of Hierasykaminos, which was the southernmost outpost of Egypt during the Ptolemaic period.

Shortly after this the desert again comes down to the river, and what limited cultivation prevails is now confined to the east bank, which in turn rapidly disappears until both banks present an uninterrupted scene of low sandstone rocks and yellow drift sand. A few isolated clumps of palm trees and small villages alone relieve the barren scenery until we reach

Wadi es Sebua and the great temple of that name which was built by Rameses II. This marks the limit of the work of the first Archæological Survey, for the flood level of the first raising of the Aswan Dam did not affect the country south of this point (see Chapter I). The second raising of the Dam, in 1929, carried the flood level south of Es Sebua to the Sudan frontier, and it was from here that our expedition commenced its march of exploration to Adindan in October, 1929.

Between Es Sebua and Korosko the river continues to pass through inhospitable banks of rock and drift sand, the aridity of the scene being broken for a short distance only on the west bank at El Malki, a large village surrounded by dense palm groves. Korosko, eighty-seven miles south of Shellal, is a point of considerable military strategic importance. The village stands in a flat, cultivated plain on the east bank of the river, surrounded by high, rugged mountains. A valley behind the village leads to the Abou Hamid caravan road to the Sudan, which forms a direct route across the desert to the south, cutting the bend in the Nile. During the period 1884–98, when the Sudan was under the rule of the Mahdi, the danger of a Dervish attack from this quarter was always present, and an Anglo-Egyptian garrison was kept there for some years. The ruins of the barracks and a British cemetery were still in existence when we were working in this area, but shortly afterwards, to avoid the new flood level, the bodies of the British soldiers who rested there were removed to Egypt.

During our first expedition we passed a British fort on the west bank opposite Korosko, already ruined and partly buried in drift sand. Wandering about the dismantled barrack buildings, we found fragments of Victorian beer bottles, a piece of a home-made draught board, part of a letter, etc., and I could only think of the exploring archæologist of, say, 2,000 years hence who might excavate this site, and from such objects reconstruct the life of just one more foreign army that had kept watch on this desolate country. We have found objects of similar character in Egyptian and Roman forts in this vicinity; it is only a question of date, and the Sudan campaign is only a small episode in the blood-soaked history of Nubia, the highway between darkest Africa and the Mediterranean.

Navigation is again slow after we leave Korosko, for here the Nile bends to the west and then to the north, so that we move against the prevailing wind. On the east bank the cultivation, although narrow, is luxuriant and is probably more fertile than in any other part of this country; the west bank of the river remains barren, with great sand dunes running down to the water. Perched on one of these banks of sand and stone we see the Temple of Amada, which was built by Thotmose III and Amenhotep II.

In Egypt the hyena is looked upon as a comparatively harmless animal, but in many parts of Nubia traditions of its savagery and danger to human life survive. Here at Amada we had an example; it was customary, when we remained stationary for a few days for our Nubian sailors to build

themselves a small camp on the bank near the boat, but in this locality they refused to do so and insisted on sleeping on board, much to our inconvenience. The reason given was that Amada was the haunt of maneating hyenas, and though our Egyptian workmen laughed the story to scorn, to the Nubian sailors the danger was very real. Amada got its bad reputation from a story which, as far as I could find out, was true. Some eight years before our visit the guard of the temple was killed and partly eaten by hyenas when sleeping outside his hut one night. Our Egyptian workmen suggested that alcohol largely contributed to the disaster, but I feel that the savagery of the Nubian hyena must be a fact, although its prowess is perhaps somewhat exaggerated, for stories of attacks on women and children are common throughout the country.

After Amada the river again turns to the west, and ten miles south of Korosko we reach the old capital of Nubia, Ed Derr, situated on the east bank amidst palm groves and sycamores. Until the last raising of the Aswan Dam, Ed Derr represented what little there is of Western civilisation in Nubia—a police station and a school. The rising waters of the new reservoir level have obliterated the town, and the country is now administered from Aneiba further to the south. At the north end of the town was the house of the *Kashif*, who until comparatively recent times was an independent ruler of Nubia. Behind the town are the remains of a small rock temple built by Rameses II (1292–1225 B.C.).

After Ed Derr the river turns again to the south-west and the arable land is all on the west, the low rocks coming down to the river on the east bank. At Turnas we pass a large fertile island and the west bank is thickly forested with date palms, behind which lies the village, overlooked by the ruins of a great fortress of the Byzantine period, which was built on the high rocks at the south end.

The loss of the great palm groves at Tumas was perhaps the most formidable that Nubia had to face when the Aswan Dam was raised, for the new level will ultimately destroy them. As I have said elsewhere, the Egyptian Government has paid out large sums of money in compensation, and I think finding the necessary funds was the least of their difficulties; the most difficult task that confronted them was its fair distribution to the dispossessed owners of the palm trees.

Here at Tumas we saw some of the officials of the Cadastral Survey Department hard at work on this problem; and problem it certainly was, judging by the rather pathetic sight of one lonely individual in a small palm grove, surrounded by a screaming mob of old men, women and children. The principal difficulty lies in the fact that a palm tree usually outlives two or three generations of the family that owns it. The Nubian has a particular love of legislation and the making of wills, and this, in conjunction with large families with somewhat complicated relationships, rendered the official's task something in the nature of a nightmare. The yield of dates from a palm tree might be divided between three sisters, who

before their death left their shares to their children. Some of these children might sell part of their share, or again divide it among more offspring, the result being in many cases that the official was faced with the task of estimating compensation for perhaps one-fifth of one-twenty-seventh of the value of the tree. When we consider that perhaps the whole tree was not worth more than \pounds_2 , the difficulty facing the poor official assumes enormous proportions, augmented as it frequently was by many of the principal shareholders being absent as servants in Cairo. Their affairs were often in the hands of some relative who was very ignorant of the facts, but well equipped with all the fighting spirit which seems to increase in the Nubian after the age of sixty.

South of Tumas the arable land on the west bank narrows to a thin strip and passes over to the east bank at Qatta, opposite which is a great ruined building known as the castle of Karanog, and a ruined town which was examined by the Philadelphia Expedition in 1908. These buildings probably date from the X-group period about A.D. 400-640, and may have been one of the strongholds of the Blemyes. A little further on, on the east bank, is a large village with cultivated land and extensive palm groves, and on the opposite bank of the river lies Aneiba, which since the last raising of the Dam is the centre of Egyptian Government administration in Nubia. That the country should once again be ruled from this locality is of interest, for Aneiba is built on or near the site of ancient Maam, which was the viceregal seat under the Pharaohs of the Empire (1555-1000 B.C.). The remains of a large Egyptian fort and numerous cemeteries of the Middle and New Empires were discovered here by Professor G. Steindorff in 1912-14 and were finally excavated by him in 1931.

A little further south the cultivated land on the east bank gives place to high cliffs which converge on the river. On the top of these precipitous rocks stands a great ruined fortress town known as Kasr Ibrim, dating from Roman and possibly earlier times. This most impressive ruin has been identified with Primis, and marked the Nubian frontier during one period of the Roman Empire. After this frontier was withdrawn the fortress fell into the hands of the Blemyes, and nearby we found numerous cemeteries of the X-group people when we explored the site in 1934. Kasr Ibrim has always been a point of stragetic importance, and about A.D. 1520 Sultan Selim garrisoned it with Bosnian troops; it was also the last stronghold held by the Mameiukes before surrendering to Ibrahim Pasha in 1812. It is interesting to note the effect of these later occupations on the local Nubian population, many of whom speak of themselves with pride as "Turks."

As we voyage south there are few features of interest until we reach Tushka on the west bank, where lies the grave of the Dervish leader, Wad el Negumi, who was defeated and killed in an attempt to invade Egypt in 1889. The battle took place some seven miles north-east of Tushka, in the

desert, where the Mahdi's army was finally cut to pieces by an Anglo-Egyptian force under the command of General Grenfell.

The cultivated areas on both banks are now very scanty and continue to be so until we reach Abu Simbel, one hundred and seventy-four miles south of Shellal. Here, at Abu Simbel, cut in the face of the cliff are the two great rock temples built by Rameses II; the most stupendous monuments in Nubia. No words can describe their superb grandeur and we can well understand how they must have indeed served their purpose in overawing the turbulent hordes of the south, as time and again they attempted to push their way to the fertile lands of Egypt. The power and majesty of Pharaonic Egypt is grandiloquently personified by the seated figures of the king as he gazes out across the Nile.

One of the most notable features of this district is the great number of sakvias, or native water wheels. The land on both banks of the river is at a high level, and in this southern area of the reservoir the high water does not reach the arable land on the desert edge. In Egypt the bulk of such irrigation work is done with the aid of the shaduf, which consists of a pole resting on a horizontal beam which is supported on two wooden posts; on one end of the pole is a rope to which is attached the water bucket, and at the other a weight which acts as a counterpoise. However, the sakyia is also in fairly common use, but to nowhere near the same extent as in the cultivated areas of Nubia, where they are spaced at intervals on both banks of the Nile on an average of 300 yards apart. The sakyia consists of a deep well, usually stonelined, which has an average diameter of 10 feet. Two pylon-shaped pillars support a large vertical wheel over the mouth of the well; this wheel draws up a rope to which are attached at intervals a series of pottery jars, which collect water and in passing over the wheel empty it into a channel by the side of the well. The wheel is attached by cogs to a second wheel in a horizontal position, which is turned by one or two oxen tethered to a long pole fastened above it. The beasts are blindfolded and driven round and round for hours on end, usually by a small boy seated on the end of the tethering pole. The whole contraption, although highly efficient, is most crude in construction, and is indeed strongly reminiscent of the drawings of Heath Robinson. The only concession to modern industry is the use, in some cases, of four-gallon petrol tins in the place of the pottery jars, and I feel sure that quite a large native industry is employed in the adaptation of these tins and their importation into Nubia.

Another feature of the sakyia which strikes the visitor to Nubia, often with considerable irritation, is the persistent squeaking and groaning of its primitive machinery. This is in no way an accident or due to poor craftsmanship, but is, on the contrary, a deliberately constructed feature of the contraption. The more noise the sakyia makes the more pleased is the owner, for he believes that the groans and squeaks will frighten off the evil spirits who might molest him as he drives his oxen round and round

during the night. It may thus be easily understood that while exploring the Abu Simbel area we encountered considerable difficulty in discovering a mooring place for our boats where it was possible to get a good night's rest. Some sakyias were worked by relays of men and oxen for over twenty hours a day; the period of their labours were marked out by a primitive sun clock, which was arranged, by a Sheikh, on the ground by the side of the well. Many a young Nubian has been thrashed by his father or employer for quietly moving the pegs of the sun clock in order to reduce his long hours of work.

I am told on good authority that the district of Abu Simbel is quite famous throughout Nubia for small crabs, which are eaten with relish. Curiously enough, I was unaware that such creatures existed in the Nile until we caught one while the dahabieh was moored in Cairo, long after we left Nubia. On expressing my astonishment, I was casually informed by our Nubian sailors that crabs were common throughout Nubia, and that if we had wanted any we could have had an unlimited supply while we were at Abu Simbel. However, although any variation of our poor diet in this part of the country would have been welcome, I doubt, to judge by the Cairo specimen, whether we should have accepted them with much enthusiasm.

South of Abu Simbel both banks of the river are flat and uninteresting, with limited cultivation and cone-shaped mountains in the distant eastern desert. Passing the village of Ballana, we notice a series of large tumuli scattered on both banks of the river, and it is with these remains that this book deals, for here our expedition found our Nubian treasure; the tombs of the X-group kings and their nobility (Plate 3). The arid landscape continues as we pass the Egyptian frontier at Adindan and just beyond is Farras, the site which was excavated by the Oxford University in 1910–12; here they found valuable remains dating from the New Empire down to the Meroitic period. Shortly after we reach Wadi Halfa, just below the Second Cataract, and our journey through Lower Nubia is ended.

The inhabitants of Nubia, numbering 120,000, are known as Barabara, and are racially distinct from the Egyptians, being inferior in almost every quality, particularly when it comes to a matter of work. On two or three occasions we attempted to employ them as labourers on the excavations, but their complaints of the heat, the dust and the speed of the work soon compelled us to relinquish the attempt. It was partly for this reason and the lack of man-power that we employed only Egyptian workmen, brought from Upper Egypt, throughout the five years that we worked in Nubia.

The Berberine language belongs to a distinct group of African tongues, although almost all the male population understand Arabic. The language is not written and is much harsher in sound than Arabic—in fact, one of my Egyptian colleagues told me that to him it sounded almost like English! In Lower Nubia there are two distinct dialects so different that a man from Shellal can hardly make himself understood at Abu Simbel.

From Shellal to Es Sebua they speak Kenuz, and from Es Sebua to the Northern Sudan El-Mahasi.

To-day Nubia is almost a land of old men, women and children, for all the able-bodied male population finds employment in the big cities of Egypt as servants, doorkeepers, etc., or as sailors on the Upper Egyptian Nile. Each village is represented by its sheikh in Cairo or Alexandria, and when a Nubian boy is considered old enough he is sent to his sheikh, usually the doorkeeper of some large block of flats, who soon finds him employment and generally keeps an eye on him. In this way he serves his apprenticeship, and as soon as he is capable of earning a living wage he pays a certain percentage of his salary to the sheikh as a sort of unemployment fund, and thus secures food and lodging in hard times. Throughout the big cities of Egypt there are special Berberine cafés reserved in many cases for the men from various districts, where the habits of the employers of Nubian servants receive a wealth of criticism which would indeed shock them did they know of it. Various nationalities in Egypt are supposed to give various rates of pay to their Berberine servants, and although Egyptian families are largely in favour, owing to the permanency of the job, it is the wretched Englishman who must pay the highest wages. There is no stricter labour union in the world than that of the Berberine servants; a Nubian who could quite legitimately accept £3 per month from an Egyptian master would be compelled by his sheikh to demand £4 from an Englishman, even if he himself was prepared to work for less.

The Nubian is a first-class sailor and the bulk of the Upper Egyptian river traffic is in his hands. Nearly all the sailors of the large river steamers are natives of northern Nubia and form a distinct class by themselves, with more or less fixed rates of pay, according to the type of vessel that they work on. Families will take to the river as a profession for generations and usually the son serves what might be termed his apprenticeship under his father; an admirable system which permits, strangely enough, no favouritism (except with regard to rates of pay!), and a young secondo reis, or mate, will certainly not be allowed to command his own vessel until he is absolutely capable, otherwise there might be a mishap and, what is more important, family disgrace. The reis, or captain, of one of the large sailing dahabiehs considers the ship very much as his own property, and woe betide the owner who makes even the slightest alteration without his approval. Their ideas are most conservative and, what is more unfortunate for the owner, with perhaps new-fangled views on rigging, etc., they are almost invariably right. Generations of experience of Nile navigation lie behind these Nubian sailors, and the wise man will always accept their views on rigging, canvas and weather conditions. With regard to their own native-built craft the Nubian ship-builder shows the greatest ingenuity, living as he does in a country where timber is most scarce. Sporadically throughout Nubia you will see the native ship-builder at work, and although his finished product is usually a monument of crudity, his ship is

well-found and river-worthy. Many of these Nubian boats have served their owners for three or four generations and represent to a family a fortune almost as permanent as a plot of land.

One great virtue the Berberines have is a great love for their country, to which they invariably return at the first opportunity: sickness and old age invariably call them back. Very rarely do they marry Egyptians, preferring their own womenfolk, who nearly always remain in Nubia to bear children and cultivate the small family estate. Their homes are far superior both in design and cleanliness to those of the Egyptian peasantry, and no matter how poor the Nubian his house, with its barrel-vaulted roof, is almost invariably painted white, with the doorways decorated with painted designs and inset with plates and dishes—usually stolen from his master's dinner set! I have often thought that a collector of old and valuable china might well make a profitable trip through Lower Nubia, where he would certainly make some surprising finds in the walls of some of the older houses. Many of the plate and saucer architectural decorations have been in existence for over eighty years, and even taking casual note I observed many interesting specimens, particularly in the area round Dakkeh.

In the south the women wear an outdoor dress of black, similar to their Egyptian sisters in Upper Egypt, but in the north, particularly round Dakkeh, a white dress is preferred, although its whiteness does not usually last very long, owing to the custom among Nubian women of smearing their hair and bodies with castor oil; after a very short time their clothes present a light khaki colour.

Our reception as we progressed south varied very much in different villages, but we were never very popular, for the inhabitants naturally looked upon us as the precursors of the destruction of their homes by the new water-level caused by the raising of the Dam. Although generous compensation was given to them by the Egyptian Government, many of them nevertheless considered themselves deeply injured, for, as I have said, love of their country is one of their most marked characteristics. Although large areas in the north were suggested to them as a new home, they invariably refused, and they have now built their new villages high on the desert edge above the new water-level.

In Nubia, time appears to have stood almost still, and fifty years is as yesterday. As an example of this our reception at Tushka was typical; the inhabitants avoided us on the plea that all Englishmen carried whips, the memory of which survived from the time of the attempted invasion of Egypt by the Dervishes in 1889. The Anglo-Egyptian army was pacing the Dervish host and keeping it well out in the desert, far from food and water. The inhabitants of Tushka were found to be secretly supplying the enemy, and General Grenfell forcibly transferred them by the aid of the whip to the opposite bank of the river. I don't vouch for the historical accuracy of this story, but it is generally believed by the local inhabitants; hence our cold reception.

The people of Nubia had many other surprises in store for us. While struggling with our Arabic at a tea-party given in our honour by the Omdeh (headman) of Ballana, one of the "hangers on," a very ragged old man, suddenly startled my wife with "Well, madam, how do you like our climate?" in perfect English. This was his big moment, for as the conversation continued his English slowly disappeared; he was one of the few Nubians who had travelled extensively, for he told us that for some years he had been an engine-driver in India.

All the modern Nubians are strict Mohammedans, but still retain in their burial customs many survivals of pagan times. This particularly applies to food and offerings to the dead, and at the foot of all well-kept Nubian graves one will find pottery vessels to contain food and water, just as we find in the graves of the C-group people of Nubia (2270–1600 B.C.). I have seen many Nubian women, on receiving compensation from Egyptian officials, buying cheap Greek wine from travelling merchants and pouring it over their family graves. This practice was, I must add, not generally encouraged by their menfolk!

Although much of Nubia's beauty has been spoilt by the raising of the Dam, it yet remains a delightful country, with a winter climate which is perhaps without rival anywhere in the world.

CHAPTER III

HISTORICAL OUTLINE OF NUBIA FROM THE EARLIEST TIMES TO THE X-GROUP PERIOD

RIOR to the time of the unification of Egypt, about 3400 B.C., Lower Nubia appears to have had a very sparse population, and comparatively little remains of what is called the Pre-Dynastic period have been found, other than a few cemeteries in the north between Shellal and Dakkeh. The rise of the First Dynasty in Egypt seems to coincide with a considerable increase in population, and cemeteries of the A-group (about 3400-2720 B.C.) are fairly common throughout the country. This A-group culture, as exemplified by the graves, was similar in most respects to that of the late Pre-Dynastic people of Egypt, with whom they were undoubtedly akin, being a branch of the brown Mediterranean stock. Their graves consisted of a rectangular or oval pit with an average measurement of 3 feet in length, 2 feet in width and 3 feet in depth, being just large enough to contain the contracted body of the owner with a few pottery vessels and perhaps a stone palette and a flint knife. In the rapid cultural development of Egypt which followed the unification of the country Nubia had no share, and her primitive civilisation continued its uninterrupted course until it was rudely shaken by the invasion of the Pharaoh Snefru (about 2720 B.C.); a campaign which resulted in the capture of 7,000 Nubians, with 200,000 head of cattle. Such a catastrophe must have nearly halved the population, and undoubtedly paved the way for the infiltration of a decided negro element, which has been noted in the anatomical material gathered from the graves of the B-group period (about 2720-2270 B.C.).

The Egyptians continued to hold the country in subjection until the close of the Sixth Dynasty (about 2270 B.C.), when internal anarchy and foreign invasion in the north compelled them to relax their hold, thus allowing the Nubian population, which had by that time been considerably increased by both negroid and Libyan infiltration, to develop a culture distinctly its own. This is known to the archæologist as the C-group civilisation, which developed without serious interruption, reaching its zenith during the Twelfth Dynasty (about 2000 B.C.). The Libyan element in the C-group people undoubtedly predominated, and they were apparently confined to Lower Nubia, for south of the Second Cataract we find a more negroid population with a culture which, although similar, was nevertheless distinct. These southern neighbours, the Kushites, were far more warlike than the C-group people, who must have suffered from their frequent raids and depredations, for Egyptian

protection, on which they largely depended, did not take any organised form until the accession of Amenemhat I in 1980 B.C. Their culture, therefore, developed slowly, only reaching its height when Nubia was definitely under organised government.

The C-group era lasted, roughly, from 2270–1600 B.C., and over so long a period there were inevitable changes of design and custom in their burials, but the general funerary customs remained unaltered and similar to their predecessors. Their graves consisted of a small oval or rectangular pit in which the body was placed in a contracted position, usually wrapped in leather and sometimes wearing a short kilt of the same material embroidered with beadwork. Within the grave we sometimes find bronze mirrors, toilet utensils and jewellery, mostly imported from Egypt. Above the grave was a circular superstructure built of boulder stones, and at the foot of this erection, usually on the east side, were placed numerous pottery vessels for the use of the deceased. This custom of pottery offerings is still continued in Nubia at the present day.

The villages of the C-group people consisted of roughly-built circular huts of undressed stone, with roofs probably of matting and animal skins supported by wooden poles.

With the accession of Amenemhat I, the real Egyptian domination of Nubia commenced. Probably after previous visits to Nubia, Amenembat invaded the country one year before his death, and a record of his expedition, dated to the twenty-ninth year of his reign, is written on the rocks at Korosko. This campaign was probably carried to its conclusion by his son Senusret. It is probable that Amenemhat built the great stronghold named Inebuw-Amenemhat at Kerma, near the Third Cataract. This fortress was not, apparently, just a frontier post, but was a great centre for the Egyptian trade and administration of all the surrounding country. At the time of Amenemhat I and his successor, the fortress was under the governorship of Hapzefi, one of the princes of Siut, who, although he had prepared a fine tomb for himself in Egypt, was fated never to rest in it, for he died in Nubia and was buried according to Nubian custom in a great tumulus tomb which was discovered by Reisner in 1911. At this early stage of the conquest it is evident that the Egyptians did not attempt to bring the blessings of civilisation to their backward neighbours. On the contrary, they adopted their barbaric customs, for we find that even Hapzefi, when he passed to the next world, was accompanied by numerous sacrificed slaves; a custom which at that time would have been looked upon with abhorrence in Egypt.

About 1950 B.G. Senusret I, who had been associated with his father as co-ruler for ten years, succeeded to sole power and continued his predecessor's work of conquest in the south. In the tomb of a great noble named Ameny at Beni Hasan are inscriptions which give an almost complete record of these Nubian wars; for Ameny was commander of a contingent of troops from the Oryx nome, or province, who were widely

used in the Nubian expeditions. Lower Nubia was by this time entirely under Egyptian domination, and the search for gold, probably the primary reason for the conquest, was commenced. Ameny records how he sailed south with a company of 400 picked men to get gold for the king, and we may judge of the peaceful conditions of the country when he tells us how he returned having accomplished his task without the loss of one soldier. Accompanying him on this expedition was the heir to the throne, Amenemhat, on what was perhaps his first visit to the south. Nubian gold was now flowing steadily into Egypt, and Senusret I probably built the fortresses of Ikkur, Kuban, Buhen and Semna to protect his trade routes. The great fortress of Kuban, which we excavated in 1930, was built, not only as a garrison for the Egyptian troops who controlled the native labour, but as a trading station and despatch post to Egypt of the gold found in the Wadi el Alaqi mines, which had been recently opened.

After the death of Senusret I a period of prosperity in Egypt and of peace in Lower Nubia continued under his successors. Amenemhat II and Senusret II continued to exploit the gold resources of the south; nevertheless, it is evident that the Egyptian hold was none too secure, and a great fortified wall of mud brick, parts of which are still to be seen, was built, probably by Senusret II, at the First Cataract. He also sent officials to inspect all the fortified centres in Nubia.

The real consolidation of Egyptian rule in Lower Nubia was undertaken by Senusret III, who came to the throne about 1860 B.C. Realising that the easiest method of travel and the surest method of protection would be to open the Nubian Nile to his shipping, he cut a canal at the First Cataract to enable his war fleet to pass. This canal, which he called "Most excellent are the ways of Khakaure, living for ever," was 250 feet in length, 33 feet in breadth and 23 feet in depth; from which we may realise the size of Egyptian ships at that time. With the canal open, Senusret undertook a series of campaigns against Kush, which was the name of the country south of the Second Cataract. On the termination of what was probably the first campaign, the King set up a triumphal stela which records:

"This is my southern frontier fixed in the year eight of the reign of his majesty Khakaure (Senusret III) living forever. Let it not be permitted to any negro to pass this boundary northward, either on foot or by boat, nor any sort of cattle, oxen, goats or sheep belonging to the negroes. Except when any negro comes to trade in the land of Aken, or on any business, let him be well treated. But without allowing any boat of the negroes to pass Heh northward forever."

When speaking of negroes (nhsi), the Egyptians used the term to designate the dark-skinned peoples of the south, who were not by any means true negroes as we understand the word to-day. The geographical position

of Heh is unknown, but it was probably south of Inebuw-Amenemhat (Kerma), for the inscription records that it was south of the frontier of the predecessors of Senusret III. After dwelling with the usual emphasis of an Oriental monarch on his great virtues, coupled with belittling references to the poor fighting qualities of his adversary, the King returns to the subject of his frontier:

"And every son of mine who confirms the boundary which my majesty has made, he is my son, he is born of my majesty, a son who avenges his father, who confirms the boundary of him who begat him. But he who destroys it, even who fights not for it, he is not my son, he is not one born to me. Moreover, my majesty caused a statue of my majesty to be made upon this boundary which my majesty made from the desire that ye should fight for it."

The question of the ultimate fate of this statue is a fascinating one for the archæologist; undoubtedly the Egyptians fought for it, and when, in after years, they were compelled to retire from this southern frontier, did they take the statue of the great king with them, or does it still remain, perhaps broken in fragments, at Heh—wherever that may be?

Before his death about 1820 B.C., Senusret had completely reorganised the trade routes of the south, and, apart from building new military posts, had reconstructed the fortresses of Ikkur and Kuban, enlarging the latter so that it could cope with the increased output of the gold mines. He was undoubtedly one of the greatest figures that in turn wrote their names on the scroll of Nubian history, and by the Eighteenth Dynasty (1555 B.C.) was worshipped as a god of that region. Under his successors, Amenemhat IV and Sebeknefrure, Lower Nubia remained undisturbed, and her native inhabitants, still largely free of Egyptian influence, were able to develop their culture without the interference of war and its inevitable companions, famine and pestilence. What we call the C-group civilisation now reached its zenith, and it is instructive to note that here we have just one more example of the art of a backward race only able to reach its culmination when it is compelled to sacrifice its so-called freedom for the organised protection of a more virile and civilised people. Neither before nor since has Lower Nubia enjoyed a period such as this, so peaceful and void of any great degree of foreign interference with the lives of its people. The frequent passage of Egyptian armies had little influence on the natives, and although they must have been, in certain localities, forced to labour in the mines and the military stations, they, as an obviously non-aggressive people, were apparently exempt from military service. Such was Lower Nubia (Wawat) at this period, the natives living in their rough stone settlements, tending their herds of cattle and cultivating the limited areas of arable land. Perhaps they received in payment for the meat and vegetables supplied to the Egyptian armies and military stations the small luxuries of civilisation, such as blue faience beads, scarabs or perhaps a fine bronze

dagger; and above all protection from their unruly neighbours of Upper Nubia (Kush), the warlike inclinations of whom were frequently utilised by the Egyptians in what might be termed colonial recruitment.

This peaceful state of things continued in Nubia until events in Egypt led indirectly to the ultimate extinction of the C-group culture. Lower Nubia was not a country to tempt any wide Egyptian settlement, and with prosperous conditions at home the conquerors were content with military communities at various strategic and industrial localities, leaving the rest of the country largely undisturbed. But this happy state for the natives was not to last, for Egypt, due largely to internal anarchy, fell a prey to Asiatic invaders, known as the Hyksos, who overran the country, at one time, as far south as Thebes. This catastrophe took place about 1700 B.C. and, owing to the pressure from the north, large numbers of Egyptian refugees must have retired to Nubia and settled in the more fertile parts of the country. Although we have no written records of this settlement, the evidence supplied by the cemeteries is sufficient to make the whole story clear, for, mixing with the native population, the Egyptians soon foisted their funerary customs on the more backward people. The custom of contracting the body for burial soon disappeared and with it the small oval pit grave. We find the dead placed in extended position, either on their backs or on their sides, and above them, in place of the round stone superstructure we find a small vaulted superstructure of mud brick within which were placed the pottery offerings.

Gradually the Hyksos power weakened and, finally, about 1600 B.C. they were driven back into Asia, so that when Ahmose, first king of the Eighteenth Dynasty, came to the throne in 1580 B.C. he ruled all Egypt and Lower Nubia, which by this time had become completely Egyptianised. During the long struggle for liberation against the Hyksos, Egypt's southern frontier had been neglected, and a steady pressure of the negroid peoples of Kush towards the north compelled Ahmose to turn his attention to Nubia. A long inscription recording the life and exploits of an Admiral Ahmose, in his tomb at El Kab, gives us some details of this campaign and of two revolts which followed. With the aid of their great transports, the presence of which was possible through the foresight of Senusret III in building his canal at the First Cataract, the Egyptians cannot have had any great difficulty in defeating their barbaric opponents. Lower Nubia apparently remained undisturbed, as the fighting took place in the south.

Both Amenhotep I and Thotmose I (1555 and 1540 B.C.) undertook Nubian campaigns, the latter confirming the frontier at a point near the Third Cataract, afterwards returning in triumph to Egypt with the principal Kushite chief hanging head downwards on the prow of his ship. Thotmose recleared Senusret's canal, which had by this time silted up, and he also appointed a viceroy over Nubia who was styled "Royal Son of Kush, Governor of the South Lands." Lower Nubia was now a well-governed Egyptian province with a capital city called Maam, the modern

Aneiba, which since the last raising of the Dam is once more the administrative centre of the country.

Although almost continuous warfare was waged in the far south throughout the Eighteenth, Nineteenth and Twentieth Dynasties, Lower Nubia appears to have remained free from invasion. The internal administration of the country was of a high order, and it is evident that the working of the gold mines and the safety of the trade routes were little hindered by desert raiders. Year by year its tribute, principally gold, passed into the Egyptian treasury and no doubt contributed largely to the wealth exemplified in the objects found in the Tomb of Tutankhamen. In the Annals of Thotmose III (1501 B.C.) the tribute of Lower Nubia is listed as follows:

"Year 31. 92 cattle. 1 harvest.

Year 33. 20 slaves. 104 cattle. 1 harvest.

Year 34. 254 deben of gold. 10 slaves and an unknown quantity of cattle.

Year 35. 34 slaves. 94 cattle. 1 harvest.

Year 38. 2844 deben of gold. 16 slaves. 77 cattle.

Year 39. 89 cattle. Ivory and ebony.

Year 41. 3144 deben, 3 kidet of gold. 114 cattle.

And an unknown quantity of ivory.

Year 42. 2374 deben, I kidet of gold. I harvest."

The gold mines of the Wadi el Alaqi appear to have been the most productive and we have records of how Seti I (1313 B.C.) attempted to increase the output by augmenting the water supply. He sunk a well in the desert nearby, but failed to reach water. The fruits of his labours were reaped by his son, Rameses II (1292 B.C.), who continued the work and ultimately succeeded. Undoubtedly Nubia is still a rich, gold-bearing country, but under modern conditions the labour on these mines would hardly pay. The Egyptians were able to employ vast slave labour, which was more or less unlimited; the men lived like animals and as they died were easily replaced, a condition of things impossible to-day, even if the labour was very highly paid. A few years before the World War I the Wadi el Alaqi mines were reopened, but because of the scarcity of water and high wages the project was not successful.

During the period of the Empire, Lower Nubia was enriched with the great temples, many of which still stand as monuments of by-gone prosperity. In place of the rough stone villages of the C-group peoples, brick-built towns sprang up around the fortresses and trading stations, and the culture of the period, as exemplified by the cemeteries, although comparatively poor, was nevertheless entirely Egyptian in character. This prosperous state of affairs was not to last, and as the Egyptian Empire in Syria slowly disintegrated under the Rameside Pharoahs (1167–1090 B.C.) the reaction also commenced in the south, and by the time of the accession

of the priest-king Her-hor the land south of the Second Cataract was lost to the Egyptians, and Lower Nubia itself was threatened.

As the power of Egypt declined under the kings of the Twenty-First and Twenty-Second Dynasties, the peoples of the south gradually set up an independent state, whose capital city was Napata, at Gebel Barkal in the Sudan. During the long period of Egyptian domination, they had adopted Egyptian civilisation, and it is probable that their ruling classes were largely Egyptian, not only in culture, but in blood, for the settlement of officials and soldiery during the Empire must have left its mark. This new kingdom of the south soon extended its rule over Lower Nubia, and, finally about, 748 B.C. its king, Piankhi, taking advantage of internal anarchy in the north, made himself master of Egypt. The tables were now turned with a vengeance, and just as the Egyptians called the viceroy "Royal Son of Kush," so a royal son of Ethiopia was to rule in Egypt. But the Ethiopian Dynasty was short-lived, and after the Assyrian invasion of Egypt in 663 B.C. the Ethiopian princes returned again to the south, where their kingdom later developed into what is known as the Meroitic Empire.

A curious feature, shown by our exploration of Lower Nubia, is the almost complete absence of any sign of human habitation in the area during this period; we can only conclude that with the advance and ultimate retreat of the Ethiopian armies, all the country was laid waste. Between the end of the Egyptian Empire (1090 B.C.) and the Meroitic age (300 B.C.) we found practically no archæological material of any description. A Greek inscription on one of the colossi at Abu Simbel records the passage of a mixed army of foreign mercenaries and Egyptians, sent by the Pharoah Psammetichos II about 590 B.C.; perhaps we may see in this lonely record the fate of Lower Nubia at this time: a military route for the contending armies of the north and south. It is difficult to visualise a once prosperous country devoid of human habitation, but so it apparently was, and as it may yet become again when the older generation of the present day dies out and the Nubian of to-morrow finds living conditions too hard in a land ravaged by the waters of the Aswan reservoir.

The northern area of Nubia, known as the Dodecaschoinos (from Shellal to Maharraga), was entirely colonised once again by the Egyptians under their Ptolemaic kings, but even as late as the reign of Ptolemy II the Meroitic kings held sway over the greater part of Lower Nubia; and Arq-Amen, King of Meroe, built his magnificent temple at Dakkeh. However, the influence of the Ptolemies gradually spread in the south, and by the reign of Ptolemy IV Egyptian rule was obviously recognised at least as far south as Dakkeh, for he added a chapel to Arq-Amen's Temple there, and later Ptolemy IX built the *pronaos*. The Egyptian penetration appears to have been more or less peaceful, which is what one would expect if Lower Nubia was, as I have suggested, largely uninhabited after the Ethiopian invasions. As the years went by many Egyptians settled in the Dodecaschoinos, and a prosperous Meroitic civilisation

developed in the south. There appears to have been little friction until the death of Cleopatra (30 B.C.) made Egypt a part of the Roman Empire. South of Wadi es Sebua we discovered numerous settlements and cemeteries of Meroites, which showed a prosperous and well-ruled country. But the amiable relations between the Meroitic Empire and the Egypt of the Ptolemies could not continue under the expansionist policy of Egypt's new masters. In 29 B.c. the Roman prefect Cornelius Gallus signed a treaty with an embassy of the Meroitic king, whereby the area known as the Triakontaschoenoi (between the First and Second Cataracts) should be made a Roman protectorate, although occupied by the Meroites. Such conditions could not be accepted for long by the warlike peoples of the south, and when, in 23 B.C., Roman rule in the Near East was embarrassed by the failure of the third prefect Ælius Gallus in his Arabian expedition. the Meroitic queen, Kandake, invaded northern Nubia and laid waste the towns and settlements as far as Aswan. Her triumph was short-lived, for the Roman general Gaius Petronius hurried with a large army to the south and drove the Meroites before him to Dakkeh, where he inflicted a disastrous defeat on them. Not content with this, he continued to harass Kandake's disorganised armies and finally stormed and captured Primis (Ibrim), the principal Meroitic stronghold in Lower Nubia. Having refortified it, he continued south, and finally destroyed Napata, the second city of the Meroitic Empire.

Although Primis does not appear to have been continually occupied by the Romans, the Dodecaschoinos remained under their peaceful rule for about 200 years, and we have no records of invasions from the south. The Meroites never entirely recovered from the crushing defeat dealt them by Petronius, and although the southern area of Lower Nubia was nominally part of their Empire they allowed it to be gradually occupied by the Blemyes, who, although subject to them, were more or less independent.

CHAPTER IV

HISTORY OF NUBIA DURING THE X-GROUP PERIOD

THEN we speak of the X-group, we refer to a definite culture which flourished in Lower Nubia between the third and sixth centuries A.D., filling the gap between the Meroitic and Christian eras. Up to the middle of the third century A.D. the southern part of the country was still under the dominion of Meroe, and although occupied by the Blemyes was not at that time an independent monarchy. The northern area between Maharraga (Hierasykaminos) and the First Cataract was part of the Roman Empire, but in A.D. 297, owing to constant pressure from the Blemyes, who by that time were independent of Meroe, the Roman frontier was withdrawn to the First Cataract, and the Emperor Diocletian introduced into the evacuated area a new people, known as the Nobatæ. Therefore at the commencement of the fourth century we find all Lower Nubia occupied by two distinct nationalities, Blemyes and Nobatæ, and it is to one of these two races that the X-group culture belongs. Although we cannot be absolutely certain, the balance of evidence points to the identification of the X-group with the Blemyes. We have not sufficient space to deal with this question here, but I have stated the evidence as I see it for and against this identification in my official report of the discoveries at Ballana and Qustul. There is little doubt that the great tombs discovered at Ballana and Qustul are those of the Blemye kings and nohility.

The Blemyes, with a culture and tradition largely inherited from the Meroitic Empire, were a warlike people known to the early Arab writers as the Bega, whose modern descendants are probably the Bisharin, Ababda and Hadendowa. Originally occupying the Eastern desert between the Nile and the Red Sea, it was not until the second century A.D. that they began to move north and occupy Lower Nubia, south of the Roman frontier at Maharraga. While acknowledging the overlordship of Meroe, they nevertheless set up an independent state, which they preserved and extended long after the fall of Meroe. At the end of the first century A.D. they were still far south of the Roman frontier, and at that time were a more or less legendary people to the Romans-Pliny describing them as men "whose heads do grow beneath their shoulders." But they were not to remain legendary for long, for by the reign of the Emperor Decius in A.D. 250 we find them attacking the Roman frontier, and although their advance was checked their adversaries do not appear to have had a sufficient military force to take those punitive measures which usually followed any such attacks on a frontier of the Empire. Previous to the Blemye advance, the frontier was apparently so peaceful that military rule was considered unnecessary and the whole area of the Dodecaschoinos was under the control of the civil government at Elephantine. The Roman frontier forces were obviously unable to follow the retreating Blemyes to their own country in the south, in which they must have been firmly settled. An inscription set up at Philæ in A.D. 253 records the visit of Pasmun, son of Pæse, ambassador of the King Teremen to Trebonius Gallus. Teremen may have been a Blemye king, for at this time the Meroitic Empire was struggling in its death agonies against the Black Noba.

Owing to the fact that the Blemyes had no written language, it has been impossible for us to identify any of the royal burials at Ballana and Qustul, but it is possible that one of the earlier tombs may have belonged to this King Teremen.

Further attacks by the Blemyes were made in A.D. 261, but these were repulsed by Julius Fermilianus, who held them back at the First Cataract, but it is almost certain that the Dodecaschoinos remained in their hands. In A.D. 272 Roman rule in Egypt was threatened by a Palmyrene invasion under Queen Zenobia, an Egyptian revolt in the Thebaid, and a mutiny led by Firmus in Alexandria. The Blemyes immediately took advantage of Rome's embarrassment, and, allying themselves with the Palmyrenes, invaded Upper Egypt, advancing as far north as Ptolemais (El Menshiveh) and held Koptos (Kuft), not many miles to the south, until the defeat of Firmus and the Palmyrenes by the Roman general Probus, who was placed in command of the Emperor Aurelian's army in Egypt. Probus drove the Blemyes back to Nubia in A.D. 274, and many of them adorned the great triumph of Aurelian in the company of rebel Egyptians and Palymrenes. Vopiscus, who describes the triumph, states that with the Blemye prisoners were "Axumite people of Arabia Felix." It is hardly probable that the Kingdom of Axum (Abyssinia) participated in this attack on Egypt; and the captives to whom Vopiscus refers were perhaps Bega subjects of the Axumite kings, who had allied themselves with their Blemye kinsmen.

The Roman triumph was short-lived, for in A.D. 276 the Blemyes again invaded Upper Egypt, recapturing both Koptos and Ptolemais. It is probable that the native inhabitants of the Thebaid were largely in sympathy with the invaders, and certainly the citizens of Ptolemais were in alliance with the Blemyes, for Zosimus tells us that "Ptolemais of the Thebaid, having rebelled, started a war which was at first successful. Probus crushed both Ptolemais itself and the Blemyes who had been its allies." Probus, who was now Emperor, carried more Blemye captives to Rome, whose extraordinary appearance we are told "stupefied the Roman people." His victory must have been complete, for he was able to restore the frontier to its old position at Maharraga (Hierasykaminos), which was re-fortified.

But this defeat had apparently little effect on the fighting power of the Blemyes, and twenty years later the Emperor Diocletian, in A.D. 207, finally decided that the area of the Dodecaschoinos was not worth the maintenance of the large protective force necessary to keep his turbulent neighbours in check. He therefore abandoned Northern Nubia, withdrew his frontier to the First Cataract, and invited some other troublesome neighbours, the Nobatæ, to occupy the evacuated areas, so that they might form a buffer state between his frontier and the Blemyes. These Nobatæ, who prior to his invitation had occupied the western deserts, readily accepted his offer and came into possession of the cities and fertile country between Shellal and Maharraga. They were a people entirely distinct from the Blemyes, being apparently a branch of the Noba, who shortly before the commencement of the Christian era had moved north from their original homeland in Kordofan to the oases of the Western desert. The main group of the Noba who had remained in the Sudan invaded the Gizera, and finally destroyed the Meroitic Empire in the fourth century A.D.

Diocletian, furthermore, gave a large annual grant of money to both peoples who now divided Lower Nubia between them, on condition that they should not violate the new frontier of the Empire at the First Cataract. Both the Blemyes and the Nobatæ worshipped the old gods of ancient Egypt, and they were accustomed to visit the Temple of Isis at Philæ on an annual pilgrimage to take the statue of the goddess back to their own country so that it would bring fertility to their cultivation, after which it was returned to the safe keeping of the temple. Diocletian arranged that priesthoods of all three nations, Egyptian, Blemye and Nobatæ, should reside at Philæ to perform the sacrifices and ceremonies necessary for their respective peoples. As we shall see, it was the violation of this arrangement of Diocletian that ultimately gave the signal for the final struggle, in which the Blemyes stood foremost as the champions of the ancient paganism. Diocletian's policy was successful, for although the Blemyes and Nobatæ were in a state of almost continuous warfare, the Roman frontier remained intact until the introduction of Christianity by Constantine in A.D. 323.

Christianity was also gaining ground in the far south, and in A.D. 359 the Christian King of Axum made war against the Noba, who had so recently destroyed the Empire of Meroe. This King, Azana by name, mentions on his triumphal monument that he advanced as far north as the frontier of a people whom he calls the Red Noba, who are probably to be identified with the Blemyes. Christian pressure from both north and south no doubt increased the aggressive feelings of so tenacious a people against the rising tide of the new faith, and when, in A.D. 390, Theodosius I issued his edict for the compulsory Christianisation of Egypt and the closing of the temples, the Blemyes once more became champions of the old gods, whose twilight was falling. By this time all Lower Nubia at least as far north as Taphis (Tafa) was in their hands, and as the Nobatæ

still retained their paganism this country became what might be considered the last refuge of the ancient faith.

Between A.D. 407 and 425 the land of the Blemyes was visited by the historian Olympiodorus, who, being a pagan, was given a hospitable reception. His account is particularly valuable in giving us some idea of conditions in a country which, even to the Romans of that day, must have appeared as a land of barbarism and mystery. The record of his visit is as follows:

"The historian says that while he was in the region of Thebes and Syene doing historical research, the Pagarchs and prophets of the barbarians, that is to say the Blemyes of the region of Talmis, conceived the idea of meeting him by reason of his reputation. And they took me he says as far as Talmis itself so that I studied also those places which are five days journey from Philæ as far south as the city of Prima which was in the past the first city of the Thebaid one would meet coming from the country of the barbarians, and for that reason it was called by the Romans in the Roman language Prima, that is to say the first, and it still retains that name although it has for a long time been occupied by the barbarians with other cities Phoinikon, Chiris, Taphis and Talmis. He says that in those countries he heard that there were emerald mines from which the emeralds were plentiful for the Egyptian kings and those mines he says the prophets of the barbarians allowed me to see but that was not possible without the royal permission."

The mention of the emerald mines is of particular interest, for we found many of these stones in the royal regalia of the X-group kings in the tombs at Ballana and Qustul. The mines referred to by Olympiodorus are probably to be identified with Zabara and Siket, in the eastern desert near the Red Sea coast. The Egyptian emerald is of poor quality and in modern times would be classed as a beryl, a semi-precious stone of no great value, but to the ancients it was undoubtedly considered a very valuable jewel, both rare and difficult to obtain.

Olympiodorus' statement that the town of Talmis was occupied by the Blemyes shows that at the time of his visit (A.D. 407-25) the Nobatæ had been ousted from the regions of the Dodecaschoinos given to them by Diocletian. The Blemyes therefore must have been at that time at the height of their power, with so secure a frontier that in A.D. 429 they were able to turn their attention to the Christian communities inhabiting the cases of Kharga. Among the many prisoners that they carried off into slavery was Nestorius, who was living there at that time in exile. Nestorius, who was consecrated Bishop of Constantinople in A.D. 428, formulated the heresy that the Virgin Mary must not be called the Mother of God, because not God but only the Temple which the Deity inhabited was from Mary, and that therefore in Christ there were two persons and two natures, and his humanity was only the Temple of his divine nature. The

heresy became widespread, but not before Nestorius was banished to Egypt, where he died in A.D. 435.

In capturing Nestorius and other Christians in the community of Kharga, the Blemye raiders had reckoned without a desert tribe, called the Mazacæ, the threat of whose attack compelled them to release the captives, who ultimately found refuge in the White Monastery at Akhmin, at that time ruled by its militant Abbot, Shenouti. They and other refugees remained within the protecting walls of the monastery for three months and Shenouti relates that they consumed eighty-five atabas of wheat and 200 atabas of olives, at a total cost of 265,000 drachmæ. This is not surprising when we learn that the monks had to feed over 20,000 of them, but it would indeed be interesting if history could relate the conversation between the orthodox Shenouti and Nestorius when they first met!

Although apparently the Blemye attack on Kharga was not an entire success, their raids on the Roman frontier were, and by the middle of the sixth century the Thebaid was in their hands, with the Christian community besieged in the fortified monasteries. No doubt the invaders were assisted by the pagan inhabitants of the country, and Appion, Bishop of Elephantine (Aswan), appealed in vain to the Emperor Theodosius II for military help to protect his diocese. He mentions both Blemyes and Nobatæ, and it is evident that both peoples were allied in a common antagonism to Christianity. That the Blemyes established some form of law and order in the conquered territory is shown by three documents found at Gebelen during the latter half of the last century. Written in bad Greek on gazelle skin, they also show that the Romans had more or less accepted the rule of the Blemye kings over the Thebaid; so much so that they were willing to pay tribute to their pagan enemies. We have gathered from our excavations that the Blemyes had no written language, and therefore the bad Greek of the documents is not surprising, having been written possibly by an Egyptian slave. Additional evidence of this is shown by the fact that signature marks are placed by the side of the name of the writer and the witnesses. The first letter runs as follows:

"I Kharachen, Kinglet of the Blemyes write to the children of Kharachen, Charapatkur and Charahiet, that by my order I have given the administration of the island called Tanare and nobody according to my order should hinder you. And if the Romans make difficulties and do not pay the ordinary tribute, neither Phylarch nor the Hypotyrannos will prevent you from compelling the Romans from paying the ordinary tribute of my island.

"Kharachen. Kinglet.
"Laize. Domestikos. Witness.
"Tiutikna. Domestikos. Witness.

"Written by me Sansnos (?) Scribe, in the month Paophi 24 in the first Indiction."

The island of Tanare is probably to be identified with the island which lies opposite the village of El Mialla on the east bank of the Nile, just south of Gebelen. Taking into consideration the reference to Roman tribute, it is possible that the locality marked the northernmost limit of the Blemye dominion. Kharachen describes himself as "Basiliskos" (kinglet), but, as I have pointed out in my excavation report, the word to the Blemyes probably signified king and we may see in him perhaps one of the monarchs that we found buried at Ballana and Qustul.

But the Roman government could not tolerate such conditions in Upper Egypt for long, and in A.D. 452 the Emperor Marcianus ordered his general in the east, Maximinus, to march against the allied forces of the Blemves and Nobatæ. The Romans were triumphant and Maximinus was able to extract somewhat humiliating terms of peace from the champions of paganism. Nevertheless, the power of his adversaries was not broken and he was compelled to include in his peace terms an agreement whereby the pagan ceremonies of the Temple of Philæ should continue. Judging from the account of these events given to us by Priscus, the Blemyes and Nobatæ stood in awe only of the general Maximinus, and not of the Roman army, for their ambassadors, who were sent to ask for an armistice, somewhat naïvely suggested that they should only keep the peace as long as Maximinus should remain in the Thebaid. Upon his refusal to accept such foolish terms, they suggested a period of peace for as long as he should live, but he ultimately forced them to agree to a truce of 100 years. They were also forced to release all Roman captives, whether taken in that campaign or during the previous struggles, and, what was even harder for so proud a people, they were compelled to deliver up to the Romans hostages of noble family. The only concession that they were able to obtain was the continuance of the custom of the annual pilgrimage of the statue of Isis to their own territory, in order to bring fertility to their erops. No doubt the Christian hierarchy demanded the closing of the Temple of Philæ, but Maximinus was wise enough not to push his advantage too far, for the power of the Blemyes had only received a temporary setback and as soon as he died they raided Egypt and rescued their hostages. Florus, the procurator of Alexandria, contented himself with driving back the raiders, but wisely overlooked the matter of the rescued hostages.

However, Christianity was slowly gaining ground among the Nobatæ, and as their religious beliefs changed so they became the friends of Rome and began at last to assume that function that long years before Diocletian had planned for them—namely, a buffer state between the Thebaid and the Blemyes. Thus, beyond minor raids, the peace of Maximinus appears to have been observed for over eighty years.

The triumph of Christianity and the destruction of the Blemyes was foreshadowed by the conversion of the King of the Nobatæ about A.D. 540 by the monophysite missionary Julian, who was sent for this purpose by the Empress Theodora. Although by a trick on the part of his mistress

Julian arrived prior to the emissaries of the orthodox faith who had been despatched by the Emperor Justinian, his triumph was short-lived, for shortly afterwards the Nobatæ accepted the doctrines of the latter.

The Emperor, taking advantage of the conversion of the Nobatæ, closed the Temple of Philæ, imprisoned its priesthood and had the statues of the gods sent to Constantinople. This was the signal for the final struggle, and about the middle of the sixth century the Nobatæ king, Silko, attacked the Blemyes, probably aided by Roman troops. He completely defeated them and overran their territory, and although they lingered on as desert raiders for a few more years their power as a nation had passed with the old paganism, and they disappear from the pages of history, carrying with them the last lingering traditions of Pharaonic Egypt.

Silko's triumphal inscription, written in bad Greek on the walls of the Temple of Kalabsha, records the tragic end of this warlike people, champions of an outworn faith. It runs:

"I Silko, kinglet of the Nobatæ and of all the Ethiopians, went to Talmis and Taphis. Twice I made war with the Blemyes and God gave me a victory. After the three times I was victorious again and occupied their cities; I established myself there with my armies. The first time I conquered them and they supplicated me; I made peace with them and they swore to me by their idols and I trusted their oath as I believe them to be honest men. I went back to my upper regions. When I became a kinglet I did not follow behind other kings but in the very front of them, for those who seek a quarrel against me I do not let them sit in their country unless they beseech me and supplicate me, for I am a lion in the lower country and I am an oryx [?] in the upper country. I made war with the Blemyes from Primus to Telelis once and [with] the other Nobatæ in the upper country. I ravaged their countries because they sought a quarrel with me. The lords of the other nations who quarrel with me, I do not drink water inside their house, for my enemies I carry off their women and children."

CHAPTER V

THE DISCOVERY

THE third expedition of the Archæological Survey sailed from Shellal on October 27th, 1931, and arrived at the Temple of Abu Simbel five days later. Abu Simbel marked the limit of our previous season's exploration, and so prior to the arrival of our workmen we devoted the week following to a thorough exploration of the low desert south of the temple, to enable us to gather some idea of the work that lay before us, and to formulate our plan of campaign. Accordingly, early on the morning of November 3rd we moved southward in extended order across the desert on the west bank, where beyond Abu Simbel the cliffs and gravel terraces recede from the vicinity of the river. Only very scanty vegetation, mainly composed of a few palm and acacia trees which border the edge of the river, relieved the rather monotonous scenery of this region until we had passed the small village of Ballana. Beyond the village we came in sight of a series of large circular mounds, partly covered with vegetation. Owing to the fact that they varied so much in size, the largest being over 12 metres in height and the smallest 2 metres, they presented at the distance from which we first saw them a quite natural appearance of the drift formations of sand so common in the Nubian desert (Plate 3).

We reached the mounds about noon, and it was only when we had climbed one and noted its completely circular shape and the fact that they were all covered with a layer of large schist pebbles that we began to consider the possibility of them being the work of man. No sooner had this possibility occurred to us than a thorough examination of the area surrounding them revealed the existence of numerous fragments of Romano-Nubian pottery vessels, and although we found no fragments of human bones, so common on the surface of a plundered cemetery, we came to the definite conclusion that these great earthworks were artificial, being probably the work of the X-group people who inhabited Nubia during the third to the sixth centuries A.D.

These great mounds had been noted by many previous travellers in Nubia, and it is interesting to consider their opinions as to the probable origin and archæological value. In 1813 Burchardt saw the tumuli at Qustul and, in comparing them with the mounds of the Syrian deserts and on the plain of Troy, came to the conclusion that they were artificial. He does not mention the larger tumuli at Ballana, on the opposite side of the river, but perhaps his attention was so centred on those at Qustul that the others, concealed as they were by vegetation, escaped his notice.

In 1883 Professor Golénischeff, the famous Russian Egyptologist, also

noted the site at Qustul when on a voyage up the Nile. Curiously enough, he travelled on the same *dahabieh* that we were to live on when the discovery was made fifty years later.

Other explorers also noted the curious mounds, but in most cases failed to recognise their artificial nature, or even if they did, considered them as being unworthy of investigation. A notable exception was Miss Amelia Edwards, who journeyed through Nubia in 1874. She wrote her impressions in A Thousand Miles up the Nile, a book which may be considered almost a classic of its kind. Miss Edwards, who was one of the founders of the Egypt Exploration Society, was a remarkably gifted woman, and her almost uncanny insight of the archæological value of the Qustul and Ballana mounds is worthy of record. She wrote as follows:

"Some way beyond Kalat Adda, when the Abou Simbel range and the palm island have all but vanished in the distance, and the lonely peak, called the Mountain of the Sun (Gebel esh-Shems), has been left far behind, we come upon a new wonder-namely, upon two groups of scattered tumuli, one on the eastern, one on the western bank. Not volcanic forms these; not even accidental forms, if one may venture to form an opinion from so far off. They are of various sizes; some little, some big; all perfectly round and smooth, and covered with a rich greenish-brown alluvial soil. How did they come there? Who made them? What did they contain? The Roman ruins close by the 240,000 deserters who must have passed this way—the Egyptian and Ethiopian armies that certainly poured their thousands along these very banks, and might have fought many a battle on this open plain, suggest all kinds of possibilities, and fill one's head with visions of buried arms, and jewels, and cinerary urns. We are more than half-minded to stop the boat and land that very moment; but are content on second thoughts with promising ourselves that we will at least excavate one of the smaller hillocks on our way back."

Fortunately, Miss Edwards did not investigate the mounds on her way back. I say "fortunately" for she had neither the time, financial means nor equipment to complete a detailed excavation of the site and had she disclosed the contents of even the smallest tumulus the secret would have been passed to the local inhabitants, who would have quickly plundered all the tombs. As it was, they remained ignorant of the artificial nature of the mounds, as I shall describe later.

Having few books with us in Nubia, we were at that time, of course, ignorant of the opinions of our predecessors, with the exception of Weigall, who informed us in his *Report on the Antiquities of Lower Nubia*, p. 142, that "there are no ancient sites here."

Therefore when we returned to the *dahabieh* at nightfall our conversation after dinner was confined almost entirely to the mystery of these mounds. Were they natural geological formations? Were they artificial dumps left

by the X-group people in the construction of tombs? Or were they the tombs themselves? Again, how much would it cost us to excavate one of them? The financial grant to the Archæological Survey was at that time running rather low, and as we calculated that the excavation of even one of the smaller mounds would cost us f_{200} , we were naturally rather afraid to risk such a sum in what might prove a fruitless experiment. If the tombs existed, it was almost certain that the actual burial would be situated below the mound, and not within it, and it was obvious that hundreds of tons of earth would have to be removed before we could be even certain that we were digging an ancient monument and not just a dump. However, this problem was soon solved for us; on the following day a guard of the Antiquities Service came to us with the information that two weeks previously he had caught three natives attempting to dig some small graves in the desert on the east bank of the river, at a point just opposite the mounds of Ballana. We crossed the river to see what damage had been done, and were astonished to find that the robbers had been digging a few small X-group graves which were situated between a series of mounds, similar in almost every respect to those on the opposite bank of the river. Owing to the fact that these mounds were not overgrown with vegetation or silted up with sand like those at Ballana, we were soon able to discover slight depressions at the foot of the west side of each of them. We came to the natural conclusion that these depressions marked the entrance to the tombs, but a preliminary investigation soon proved that they were the openings of tunnels made by plunderers, who had robbed the tombs in ancient times, probably over 1,200 years ago.

Fortunately for us, the local inhabitants had no idea that the mounds might cover ancient tombs, and when this was suggested to them they laughed and informed us that Goha, a legendary figure of Arab story-telling, had, hundreds of years ago, collected dumps of grain and placed them in the desert, where an evil spirit had promptly turned the grain into sand, much to Goha's disgust. These mounds at Qustul were all that remained of the grain and were not worthy of our attention! However, not having much faith in the marvels of Goha, we thought differently.

After a preliminary survey and numbering of the mounds at Qustul on the east bank, we commenced the clearance of the robbers' passage in one of the larger tombs. The passage was not cut in the mound itself, but in the natural ground below, and as it did not exceed 2 feet from floor to roof, coupled with the fact that in some parts the walls and roof had collapsed, excavation was both slow and difficult. After some hours, the entrance was cleared of debris, and late in the afternoon we were able to crawl on hands and knees down the passage for a distance of about 50 feet, until it broke through the wall of the tomb (Plate 4).

The sight that met our eyes as we gazed through the aperture with the aid of two flickering candles was certainly remarkable; a low, vaulted room of burnt brick, with the floor covered with hundreds of fragments

of broken pottery, mouldering pieces of timber, and fragments of human bones. On entering through the plunderers' hole, we found a small door on our left which gave access to two more vaulted rooms, filled with pottery wine vessels, the remains of leather bags containing dates, and a large number of human skeletons. These two rooms had not been disturbed by the robbers to anywhere near the extent of the other room which we had entered first, and it was evident that they had been reserved for the food and drink of the owner of the tomb who had been laid to rest in the first room. The skeletons were mostly of young women who had been sacrificed so that they might accompany their master to the next world. Further examination of the main chamber showed us that it had been completely ransacked and that nothing of intrinsic value had been left by our predecessors. A fall of earth at the east side of the room revealed a large doorway with a heavy stone lintel. This doorway had originally been blocked with brick, and part of the blocking had been removed by the plunderers with the obvious expectation of further rooms beyond. But in this they were disappointed for they must have found to their horror that as soon as they had removed the bricks a great rush of sand came through the opening and started to fill the room. The blocked door was merely the proper entrance to the tomb and, as we correctly guessed, had behind it an open court which after burial had been filled with sand prior to the erection of the mound.

We were thus left with another difficult decision to make; was the possibility of discovering anything of importance outside the entrance of the tomb worth the great expense that would obviously be incurred in the removal of the mound? For in no other way could this knowledge be gained. It was evident that the tombs belonged to very important people, probably royalty, but our examination of the burial chambers showed that the plunderers had left very little. By clearing the plunderers' passage, we would be able to gain more or less complete scientific data, such as the method of burial, anatomical material, pottery types and any other evidence that the plunderers had spared us. This could be done without greatly depleting our rather slender financial resources, but it would leave us with one important feature of our research undone. This was the architecture, for complete plans of the tombs could not possibly be made without moving the mound. Such constructions as these have never been found before, and after a great deal of consideration we decided to remove the mound above Tomb 2 (Plate 3). We had at that time only 150 men and boys, so that the work was necessarily slow, but by November 30th a large V-shaped cut had been removed from the mound, and on the east side we were down to ground level. A descending ramp was soon disclosed, running from east to west, and we commenced the gradual descent towards the entrance to the tomb. The discovery of two iron axe-heads in perfect preservation spurred us on, and shortly after we uncovered the skeleton of a horse, which lay near the head of the ramp. This

discovery was, I must confess, rather disconcerting and it was not until we had descended the ramp still further and uncovered more skeletons of horses, donkeys and camels that the significance of these remains was apparent to us (Plate 4). Just as the owner of the tomb had his slaves buried with him within his eternal home, so he must have his horses, etc., outside his house for his use in after-life. As we neared the foot of the ramp we found that some of the horses had silver-mounted wooden saddles on their backs. The leatherwork was reduced by time to the consistency of burnt paper, and the wooden frames and silver mountings were so fragile that beyond drawing and photography little could be done except embedding them in molten wax for future examination. At last we reached the small open court before the entrance of the tomb, and here we found more horses with their sacrificed grooms. The animals had all been poleaxed, but the men had apparently met their death by strangulation, for we found no traces of violence on their skeletons. It is, of course, possible that they were poisoned or drugged before the court of the tomb was filled in. The horses in front of the doorway were evidently the favourite animals of the owner, for, apart from more elaborate silver-mounted saddles, they also bore heavy silver chain-disk trappings and silver bridles and bits (Plate 8). With these discoveries we at last fully realised the value of the find, having more or less certain knowledge that a vast ancient treasure lay within our grasp.

On the completion of the excavation of Tomb 3 (Fig. 2) I informed the Director-General of the Service des Antiquités of our discovery, with the result that on January 15th he visited the site and examined our finds. He immediately appreciated their great historical value, and arranged for a small subsidiary credit to enable us to continue our work at Qustul without interruption, for, as I have already said, our funds were running dangerously low. Furthermore, after we had pointed out the vast possibilities of the mounds on the west bank of the river at Ballana he agreed to apply for further large credits from the Ministry of Education. After his departure we continued the excavation of the Qustul mounds, being rewarded with an ever-increasing hoard of unique objects from each tomb, although all were partly plundered. All the tombs had been examined by January 26th, and with a view, I must confess, to the applied-for credit, we moved camp across the river and commenced the clearance of one of the largest mounds in the Ballana group.

Here our undertaking was very different, being much greater than anything we had encountered at Qustul, for, apart from the fact that the material of which the mounds were built was very much harder, the tumulus of No. 3 was far larger: 12 metres in height and 77 metres in diameter. Day after day our men attacked this vast mound of earth, and as we were still comparatively few in number, and at that time had no light railway, we seemed to make little impression on it (Plate 7). Day after day we visited the excavations hardly noting our slow progress and

always with the thought of our rapidly dwindling subsidiary credit. At last, after six weeks' labour, on March 6th we reached the natural ground level, after having removed nearly half the mound. But to our dismay, instead of finding the expected pit and vaulted brick tomb within it, we were confronted with an even surface of black soil, apparently unbroken by any artificial construction. I shall never forget those awful moments as staff and workmen argued as to whether the Ballana mounds might be different from those on the opposite side of the river, and be, as we first thought them, natural drift formations. Fortunately, we had with us an optimistic workman, whom I still have with me at Sakkara, by name Mohammed Ibrahim. While the rest of our men continued to argue, almost in despair, Ibrahim started to dig a small pit in the supposed natural soil, and only about 2 feet below the surface he unearthed three small fragments of pottery. That was sufficient, for we realised, with what I might mildly term considerable relief, that the ground on which we stood was artificial; moisture probably caused by floods had welded the mud bricks and natural alluvium into one solid mass.

It was already growing dark when Ibrahim made his discovery, so we closed down for the night with high hopes for the morrow. Preliminary work the following day soon showed us that the hole Ibrahim had cut had been driven through the vaulted roof of a small room built within a pit which had been sunk in the hard alluvial soil. The walls and roof had been built with mud brick and owing to the moisture had collapsed and become welded into one solid deposit, which, when cleared, revealed numerous pottery wine vessels. Behind these jars at the south end of the chamber, we found a large group of silver objects, consisting of large embossed plates, bowls and cups, a casket, incense-burner and spoons (Plate 9).

Working our way into another room, we discovered what remained of the burial, which had been disturbed by plunderers, but their work was not very thorough, for, apart from great bronze lamps and vessels, we found more objects of silver, and at the far end of the room a beautiful gold necklace (Plate 20), which must have been dropped by one of them. This, and the fact that so many of the objects of intrinsic value remained, suggests that the plunderers were disturbed, and, moreover, were unable to return to complete their work. As at Qustul, they had entered the tombs by driving a tunnel below the mound, and I think it is quite probable that they went through a similar experience (although of a more serious nature) to ours in the horse chamber of Tomb 3 at Qustul, which I have described in Chapter VI. Perhaps the roof of the tomb commenced to fall as they were at work, compelling them to retreat hastily, leaving much of their plunder behind.

When we had finished the excavation of this tomb we closed down for the season and at the end of March returned to Cairo with a large collection of unique antiquities, and the knowledge of a hitherto unknown civilisation—what might perhaps be termed the last chapter of ancient Egypt's history. Little did we realise that we were only more or less at the commencement of our discoveries and that in the following season we were to find in the northern area of Ballana the actual tombs of the kings, untouched by the plunderers. The Ministry of Education soon granted us a further large credit to continue our work and we returned to Nubia in October, 1932, with a company of 400 workmen and the added equipment of a light railway.

We started work on Tomb 6, which was one of the largest in the group, with the full expectation of finding a burial as rich as, if not richer, than the great mound cleared at the end of the previous season. With our extra workmen and equipment, we made rapid progress and in less than two weeks the whole of the outline of the tomb was disclosed, but to our great disappointment, although unplundered, it proved to be very small indeed, with apparently only two rooms. The contents were even more disappointing, consisting mainly of pottery and bronze vessels. The fragile bones of two adults were found in the first room, and although they bore no jewellery, we came to the conclusion that they must represent the actual burial. Leaning in an upright position behind them were two large iron spears with silver hafts, which were in a very fragile condition, being partly embedded in the hardened mud with which the tomb had been filled when the roofing collapsed. In removing these spears, we noted that their hafts went below what we supposed was the proper floor level. Further clearance revealed the mouth of a pit which gave access to a small room cut in the rock below the north wall. In this room we found the real burial, which consisted of the skeleton of an adult with a silver crown on its head (Plate 13). The bones were so fragile that it was impossible to be certain of the sex, but as we found an iron spear and silver-mounted sword in close proximity we may conclude that in all probability the skeleton was that of a man. On the arms were two massive silver bracelets decorated with lions heads (Plate 17), and on the left hand was an archer's bow-guard or bracer, made of silver. Embedded with the fragments of the skull within the circlet of the crown were two silver earrings, and near the head was an archer's finger-loose, also of silver. The silver crown, which was formed by a plain circlet with no crest, was embossed with figures of the goddess Isis and studded with precious stones (Plate 16).

This was undoubtedly an exciting find, but was nevertheless hardly up to our expectations. Naturally, we thought that the largest mounds would cover the richest burials, and it was not until much later that we discovered that this was by no means the case. Thus we continued throughout that season to excavate all the larger mounds, most of which were situated at the south end of the cemetery. Many were found plundered and even those that were intact were very much below what we had been led to expect from our previous finds at Qustul. The tombs themselves were small, rarely having more than two rooms, and the contents, although interesting,

were by no means rich. It was evident that the tombs were of a slightly later date than those of Qustul and belonged to a period when the wealth and power of the X-group people was declining. Clearing such gigantic mounds soon depleted our large grant, and by February 19th our money was exhausted and we were compelled to return to Cairo with a collection of objects which, although unique and of great interest, nevertheless did not compare with our finds of the previous year. The crown from Tomb 6 was by far the finest object found, and evoked great interest among our colleagues in the Museum, but, speaking for myself, I felt that our return to Cairo was not quite the triumph that I had anticipated. I think we were all tired and a little disheartened, for we had spent nearly three times as much money as in the previous year and found considerably less.

We had spent barely a month at the Museum cleaning and classifying the objects found when the Ministry of Education was informed by the Irrigation Dept. that, contrary to expectation, the work on the Aswan Dam would be completed at a much earlier date than was at first anticipated. Consequently, the Director-General of the Antiquities Service sent for me and I was informed that our excavations at Ballana must be finished before March of the following year, and therefore we must return to Nubia and work through the early summer months. This was indeed a bombshell, for all the members of the expedition had been looking forward to an early leave and were, moreover, as I have said, tired and a little depressed. We had experienced the heat of Nubia in the winter months and on occasion had found it none too comfortable. Our feelings were decidedly mixed at the prospect of working in the Nubian Desert during April and May, when the temperature is at its highest, and I shall never forget the faces of my staff when I informed them of the necessity for our immediate return to the south.

However, the work had to be completed before the waters of the reservoir destroyed the antiquities which we knew to be there; so late in March we returned to Ballana. We soon received our reward for it was during this short and uncomfortable season that we made our biggest and richest discoveries. We decided to open our work with the removal of some of the small mounds at the north end of Ballana. On April 13th we cleared Tomb 80 and were rewarded with our first rich royal burial, entirely unplundered. This was soon followed by others, for, owing to the fact that the tombs at the north end of the site had collapsed earlier than the others, the plunderers could not penetrate them by their usual method of tunnelling. In these tombs we found the crumbling skeletons of the Kings, with massive jewel-encrusted silver crowns upon their heads, and silvermounted spears and swords at their sides (Plate 9). With them were their sacrificed slaves, and in some cases we found that even their Queens, wearing their crowns and jewellery, had been compelled to accompany their husbands into the after-life. Apparently the death of one of these ancient monarchs entailed the sacrifice of all those nearest to him: his wife, his slaves, male and female, guards, grooms, horses and even his dogs. We found many of the human bodies lying face downwards as if they had been struck with axe-blows from behind, and others who had probably met their death by strangulation. As we cleared their poor mouldering bones we could visualise that scene of horror as the body of the King was laid in his tomb, followed by terror-stricken men and women, dragged down into the darkness by their slayers.

At the commencement of the work the temperature was quite bearable. rarely exceeding 100° F. in the shade, and so it continued until the beginning of May. In fact, we came to the conclusion that we had greatly overestimated the hardships of working in Nubia during the summer. But we were soon to realise that our first fears were correct, for with the commencement of May there was a rapid change, and in a few days we were faced with almost unbearable heat. Our thermometer registered up to 120° F. and it reached this figure at ten o'clock in the morning! This would not have been so bad if we had been able to remain on the boat under cover, but working in the open desert under such conditions was almost impossible, and if we had not been making such interesting discoveries I doubt if we could have had the spirit to continue. It is amazing how clever one becomes in finding even a few inches of shade when one is faced with heat such as this. To add to our discomfiture, we were compelled to work below ground level in the pits in which the tombs were built, and naturally we did not receive the benefit of even the slightest wind: Added to this was the fact that, as many of the silver objects were so fragile that they had to be treated with paraffin wax, we sometimes had to spend hours in close proximity to the Primus stove on which the wax was boiled. Even near-by objects appeared to shimmer as though one was seeing them through clouds of steam, and, worst of all, we got little relief at sundown, for then the rock and sand threw out the heat gathered during the day. Such a thing as a cold drink was unknown, for ice was just a pleasant dream that I for one sometimes got as we slept on the top deck of the dahabieh with a temperature of over 100° F, at one o'clock in the morning.

Nevertheless, it was a dry heat, which, beyond giving acute discomfort and a slight fraying of the nerves, did us no harm, so that with the continuous excitement of the rich discoveries we continued our work until the end of May. But at the beginning of June we were compelled to close down, for our workmen, even with reduced hours, could not continue any longer. I think they first realised that they had reached their limit when they were compelled to wear their shoes while at work owing to the gound being too hot for the feet. To add to their troubles at this time the scorpions which appear to infest this district were unusually virulent, and many of the men were badly stung.

A week was spent in packing the antiquities, and we reached Cairo in a triumphant, if slightly exhausted, state of mind. The following October we returned to Nubia for the last time and finished the excavation of all the remaining tombs.

In close proximity to the Ballana mounds we noted traces of a buried town, and, expecting this to be connected with them, we directed the remaining funds to its excavation. However, we were disappointed, for the ruins proved to be of a later date and had no relation in any way with the X-group people. It was during this work that we noted in the desert near the river edge small irrigation channels used in ancient cultivation, and realised that over the whole of the area a foot or two of sand covered what was perhaps fertile alluvial soil. At that time government experts were searching Nubia to find land above the new reservoir level which might be reclaimed from the desert. We therefore made our discovery known, and after the land surrounding the tombs had been examined by officials from the Department of Antiquities, the Egyptian Government decided to turn the desert at Ballana into an oasis, in which many of the Nubians who had been dispossessed of their land might be resettled. After our work of excavation was completed, the Ministry of Public Works sent down hundreds of men who dug great channels and installed elaborate modern pumps. The scheme has been a great success and land which we found as desert is now becoming a valuable cultivated area of Nubia.

In connection with the reclamation of the land at Ballana, I should like to record a series of coincidences. One year after the completion of our work in Nubia my wife and I were standing on the upper deck of a ship at Liverpool on which we were to sail to Egypt. We were idly watching the loading of one of the stern holds when my wife suddenly pointed out numerous large packing cases addressed to Port Said and marked "Ballana." Our astonishment may be judged when it is realised that Ballana only consisted of a few mud huts, and prior to our discoveries was not even a name on a map. Enquiries proved that the cases contained the parts of big river pumps to irrigate the reclaimed land at Ballana and Qustul. Just a small coincidence, that out of the hundreds of ships sailing for Egypt we should travel in company with the Ballana pumps; but these pumps and I were to meet again years after in even more unusual circumstances. In 1942, when Rommel was knocking at the door of Egypt, I was serving with the Intelligence Corps of the British Army in Egypt. On July 2nd, with Cairo in a state of crisis and turmoil, I was ordered to ascertain if auxiliary pumps had been installed at Rod el Farag, in case Cairo main water supply was bombed. On making the necessary enquiries, I again met the Ballana pumps that had been brought down the Nile all the way from Nubia. I hope our next meeting, if ever, will be under less hectic circumstances.

But to return to the record of the discovery. The excitement of excavation was now over and in the Museum in Cairo we settled down to the more prosaic work of cleaning, exhibiting, and writing up the discoveries. The cleaning of the objects, particularly the delicate silver work, took many

weeks, but it gave us moments of excitement almost as great in some cases as those we had experienced in the field. For example, the magnificent plate bearing the figure of a composite classical god was thought to be bronze and of rather crude workmanship, but a few hours' work in the laboratory soon revealed the fact that it was of solid silver and the workmanship of beautiful quality (Plate 22, a). The varying conditions of the silver objects was astonishing; some took a day to clean and were of almost egg-shell fragility, while others—as, for example, some of the bridles—only needed a rub with water and a soft wire brush to restore them in a few minutes to the condition in which they left the craftsman's hands.

An amusing sidelight on the arranging of the objects in the Museum was the search for model horses on which to exhibit the saddles, bridles and trappings (Plate 26). It was at first thought that we would have to send to Europe for them, which would have meant a delay of many months, but fortunately it was remembered by the Chief Curator that a life-size wooden horse was kept in a certain saddler's shop as a dummy on which horsemen could try their saddles, etc. The proprietor of this establishment willingly agreed to lend us his wooden horse in order that we might make plaster casts from it in the workshops of the Museum. The difficulty was to get the model to the Museum. A horse-box was hired for the transit, but as the wooden animal could not bend its head it would not go in, and, finally, we had to get men to pull it through the streets of Cairo to the Museum. Its stately progress through the streets was followed by crowds of howling small boys, and I am sure that the entry of the Greek Horse into Troy was not more impressive than the passing of the Australian hunter into the grounds of the Museum.

After twelve months' work, the exhibition of the Ballana and Qustul finds was completely arranged in the Nubian Room of the Museum. It was, of course, impossible to show all the antiquities found, owing to lack of space, but neither was it necessary, for many of the objects were duplicated and we had to content ourselves with a wide, representative collection.

CHAPTER VI

THE TOMBS OF QUSTUL

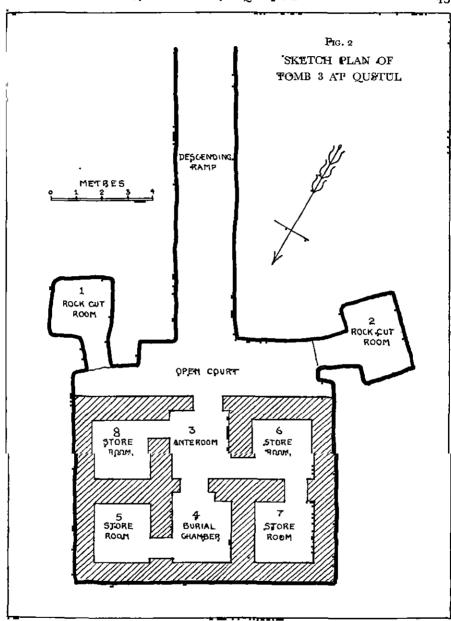
As there are sixty-one tombs in the Qustul group, it is, of course, impossible to describe them all in detail, and I have therefore restricted myself to the following representative selection.

Tomb 3 (Fig. 2)

This tomb was by far the largest in the group, the earthern tumulus above it measuring 53:40 metres in diameter and 9:70 metres in height. The days spent in the removal of this tumulus were perhaps the most exciting of that season's work, for in it, rather like currants in a cake, we found numerous objects which had been buried as offerings when the mound was raised after the actual burial had taken place. The first object found, near the crest of the mound, was a large circular shield of leather, in perfect preservation (Plate 8). In general design it was similar to the shield used by the Bega tribes in the Sudan at the present time, so much so that at first we were almost doubtful of its antiquity. The only part of the shield that had in any way decayed was the wooden grip, which consisted of a rod passing through slits cut in the leather on each side of a "spike" boss which formed the centre of the shield. The outer face was decorated with elaborately embossed spiral patterns which must have been stamped on the leather when it was soft (Plate 35, c).

Working slowly through the debris of the mound we next came across the remains of a large spear. Little remained of the wooden haft except a brown powder, but the blade and butt, which were of iron, were perfectly preserved, and only bore the faintest traces of rust. The blade, measuring 32 centimetres in length, was of the wide "shovel" order usually associated with the Masai of Kenya; altogether a most formidable weapon. The iron butt in the form of a spike 13 centimetres in length almost certainly belonged to the spearhead, but owing to its original position being disturbed by the pressure of earth it was impossible, from its relative position to the blade, to ascertain the exact length of the spear, as we were able to do with other examples later found at Ballana.

Our next find in the debris of the mound consisted of a group of three iron knives, obviously not weapons, but designed for domestic purposes. The blades of all three knives were slightly hollow-ground with a single cutting edge, and were attached to the handles with a wide tang. Two of them had flat handles of horn of the same width as the blade and with a rounded top, but the handle of the third knife was far more elaborate



(Plate 40, c). It was made of ivory, elaborately carved in the form of Bes, the Egyptian god variously considered the patron deity of matrimony, birth and drink. The worship of Bes was very popular in the Sudan during the Meroiric period, when he is frequently associated with warfare, but figures of the god often form part of the decoration of articles of toilet, such as mirror handles, eintment pots, etc. On this knife handle he is

represented in the conventional form as a bearded dwarf standing on an arched shrine.

With these knives we found an ivory comb of unusual shape, almost Mongolian in design, with a high rounded back decorated with floral designs in red and brown paint (Plate 36, c).

At a lower level, almost at the base of the tumulus, we uncovered an object which appeared at first glance to be rather like a picture frame (Plate 8). On turning it over we found the underside elaborately inlaid with ivory and soon realised that it was a gaming board of a most unusual type, although it was obvious that the game for which it was designed would be very like the so-called draughts of the ancient Egyptians. The board, which measured 77.5 centimetres by 37 centimetres was composed of a single piece of wood with a framed border with corner brackets of silver. The "places" were marked with ivory fretwork inlay and consisted of three rows of twelve squares, in conventional floral design. Each line of "places" was divided into a group of six by centre pieces, which in the case of the top and bottom rows takes the form of a half circle, and in the middle row a full circle. For carrying purposes, the board has a silver handle attached (Plate 32 a).

When we lifted the gaming board we found beneath it the remains of a leather bag which contained fifteen ivory and fifteen ebony pieces. With them were five ivory dice and the fragments of what appeared to be a small wooden box mounted with silver. The character of the dice was obvious, for they were marked in the same way as the modern variety from one to six (Plate 32, c); but the fragments of the wooden box were indeed a puzzle, and it was not until after many hours of fitting and refitting at the Cairo Museum that we finally found out what it was. It was foolish of us not to have realised at once that to play with dice one must have a dice-box, and here was the dice-box of a most original design (Plate 32, b). Known as the pyrgus, it was largely used by the gamesters of the Græco-Roman world, its popularity no doubt being enhanced by the fact, that with it, it is impossible to cheat. The contraption was not shaken at play, for the dice were dropped through the open top, where they fell on a series of grooved boards which turned them over before they were discharged through an opening at the bottom. All these objects, board, pieces, dice and box were undoubtedly used for one game, probably very similar to the so-called draughts of the ancient Egyptians. The exact method of play is unknown, but it is, more or less, certain that the dice were thrown to determine the moves on the board, as in the game of backgammon.

The value of the finds buried within the mound spurred our workmen on to greater efforts, and it was not long before we reached ground level and commenced the clearance of the tomb itself. Although similar to Tomb 2, which I have described in Chapter V, it was a much larger and more pretentious construction. It was formed by a series of six rooms

built of burnt bricks and stone, with barrel-vaulted roofing. These rooms were constructed within a large pit measuring 9.80 by 9.28 metres with a depth of 5.30 metres, which had been cut in the natural ground. A descending passage led down to this pit from the east side, and in front of the brick-built construction, within it, an open space had been left which formed an open court before the main entrance.

Profiting from experience gained in the excavation of Tomb 2, we commenced the clearance of the passage and court before attempting any entry into the tomb itself, which our examination of the plunderers' passage on the west side of the tumulus had already shown us had been ransacked. On the floor of the entrance passage and in the court we found the sacrificed remains of five dogs, two sheep, nine horses, four camels and one donkey. Some of the horses had silver-mounted saddles, silver trappings and leather bridles with bronze fittings. Across the saddles were the remains of embroidered saddle cloth, and on one horse we found a blue-dyed sheepskin. The cloth and leather were so fragile that only small fragments could be preserved with paraffin wax, and hours were spent in examining the remains of the leather though which held the saddle frames together, with a view to the ultimate reconstruction. These saddles are in almost every feature the same as the modern camel saddle (Plate 26), so much so that when we came to reassemble them for exhibiton in the Museum we found it expedient to employ the services of a native saddler.

The main feature of the saddle is a high pommel and cantle with two thick wooden seat rods fastened to them with hide thongs. Below them are four skirt rods attached on each side of the splayed ends of the pommel and cantle with strips of leather. This wooden frame was covered with leather and stuffed with powdered straw, leaving the top of the pommel and cantle and ends of the seat rods exposed, and these exposed parts were usually covered with sheet-silver embellished with conventional Meroitic and Classical designs. Apart from the saddles, harness, etc., both horses and camels were adorned with a series of bronze bells which hung from coloured tasselled cords suspended from the neck.

Many of the animals were piled one on top of the other, and it was some time before the floor level of the forecourt was reached. In front of the door of the tomb we found two perfectly preserved flagons, one of silver and one of bronze, and near them, protected by two bricks, lay another silver vessel of unknown shape (Plate 6). The two flagons were similar in design, having a wide exterior rim at the mouth and a high neck which tapered outward to wide and rather sharp shoulders. The sides of the body of both flagons were straight and tapered inwards to a low foot-ring, and a slender handle was attached to the edge of the rim and to the top of the shoulders. While the silver vessel was entirely plain, the bronze specimen was decorated with engraved patterns on the body and an open fretwork design at the top of the handle. Although both these

flagons were of considerable value, they were by no means unique, and our interest was centred on the other silver vessel, which lay between the two bricks (Plate 6, c). We had never seen anything like it before, and at first, as it lay partly covered with earth, we thought it represented the figure of a large and very fat pig! Only when we lifted it did we realise its true character; a vessel in the form of a water skin. The neck was detachable and formed a lid over the mouth, and the vessel was carried by a ring attached to four chains which were fastened to the feet.

The clearance of the forecourt of debris and the remains of sacrificed animals revealed the entrance of two rock-cut rooms, one at the north end and one at the south (Plate 6, a). We first turned our attention to the southern room. Near the entrance lay the skeleton of a man with an iron sword and a wooden drum, and behind him were the remains of six horses, which must have been the favourite chargers of the owner of the tomb, for three of them wore elaborate silver bridles and trappings, some of which were studded with jewels. After a first glimpse of these treasures, seen through a small hole cut in the blocking of the door, our excitement was such that we entered the room without first observing the fragile condition of the rock and brickwork over the entrance. While examining our find with the aid of flickering candles we were suddenly alarmed by the rumble of falling debris. I shall never forget my feelings as, holding one of the jewelled bridles in my hands, I could not make up my mind whether to drop my treasure and scramble through the door to safety or to sit tight and hope for the best. But the lure of treasure overcame all other feelings and as we could not bear to leave it behind we sat in semi-darkness and in a few seconds watched the entrance of the room fill up with falling stone and brick. However, our workmen from the outside soon cleared the door, and although our fears were obviously misplaced, I shall never quite forget the experience.

These bridles, composed of headstall, reins and bit, were all of the same pattern (Plate 28). The headstall was formed by heavy silver ribbon chains joined by medallions in the form of lions' heads at points behind the ears, on the forehead and in the middle of the nose. The lion-head medallions were made of beaten silver with a backing of hard plaster and the eyes were inlaid with lapis lazuli, while the tongue, which protruded from the mouth, was of carved ivory (Plate 29). The bits, which were found attached to the headstalls and in position in the horses' mouths, were of solid silver (Plate 31, a). The design is most unusual, and one can only sympathise with the wretched animal curbed by such a contraption. It is composed of two separate pieces, both shaped rather like a sickle with a long handle. The curved ends of these pieces are hinged together and thus form a circular hole through which the lower jaw of the animal is passed. This leaves the two straight rods suspended underneath the jaw, where they are joined by a wide ring which is attached to the reins, one pull of which draws the two rods together and thus crushes the chin (Plate 28, b).

All three examples were beautifully made; the attachment to the headstall in the form of seated lions which were riveted on each side of the mouthpiece, and the straight rods were terminated with human hands which hold the rein rings. The reins were also made of silver "rope" chains and measured 78 centimetres in length.

All six horses had bronze bells attached to their necks by tasselled cords, and one wore a magnificent collar of red leather decorated with silver medallions set with precious stones (Plates 28 and 30). Five of the medallions were in the form of lions' heads with eyes set with garnets, and others consisted of open fretwork frames with large oval onyx set in the centre. The largest of the medallions which was placed in the centre of the collar had a frame set with garnets, beryls and moonstones; a claw setting in the centre held a large Egyptian scarab of blue faience. Another medallion was set with a fine onyx cameo of the head of a Roman Emperor, perhaps part of the plunder of war, just as the scarab was undoubtedly the spoil from a plundered Ancient Egyptian tomb.

After we had completed our examination of these finds we turned our attention to the corresponding rock-cut room at the other end of the forecourt. Here we found the remains of two more horses and two men, behind which were the skeletons of fifty large dogs, many of which had small bronze bells suspended from their necks, and leashes of plaited hair.

The clearance of this room completed our excavation of the unplundered part of the sepulchre and we now started work on the brick-built tomb itself. We found the entrance blocked with mud bricks, which when removed revealed a rectangular doorway with double lintels of roughly dressed sandstone, with a wide step of the same material. On the step we found the decayed remains of a thick wooden door, together with a series of circular bronze plates which had originally been nailed to its exterior side. There was enough left of the woodwork and bronze-plated socket hinges to enable us to get details of the construction of the door, but we failed to obtain any clue to the decorative design in which the bronze plates were originally employed.

Just over the threshold of the tomb were the scattered bones of slaughtered oxen, probably placed there as food for the deceased in after-life. The whole of the interior of the tomb had been thoroughly ransacked by the plunderers, who had entered through a hole in the west wall of the burial chamber (Plate 5). Over the floors of all six rooms were the fragments of human bones, both male and female, pottery vessels, bowls and cups, and mixed beads of blue, green and red faience. Of the burial of the owner of the tomb nothing remained, although no doubt he was represented among the scattered bones. What was probably part of his funerary equipment—namely, part of a leather breastplate and an arrow quiver of the same material—were found in the tunnel by which the tomb robbers made their entry (Plate 8). Although the breastplate was the only recognisable fragment that we found in the Qustul, to judge from the

numerous pieces of thick leather found in almost every burial, we can be more or less certain that it was the custom of the X-group people to bury their chieftains in such armour. Arrow quivers of decorated leather were in common use among the X-group people, for although the one in this tomb was the only intact one found at Qustul, fragments of them were common, not only in this necropolis, but in others of their cemeteries throughout Nubia. In the intact tombs at Ballana moisture had completely destroyed all leatherwork, and we found only groups of iron arrow heads stuck together in circular form to prove their existence. Their design was always the same: the upper part was in the form of a tube of hard thick leather, with a stamped decoration, while the lower part consisted of a bag of soft leather. The arrows were not very long and the quivers rarely exceeded 40 centimetres in length.

In the passage made by the plunderers we also found the remains of a circular casket with a flat base and top, which had been broken up by our predecessors when they rifled it of its contents. It was made of wood with decorative floral and geometrical patterns of inlaid ivory, the lid was hinged and fastened with a rectangular bronze lock with clasps in the form of seated lions.

The only object of any intrinsic value found in the burial chamber was a bronze hand lamp which had been overlooked by the robbers. It was in the form of a male human head, with the oil hole at the top of the forehead and the burner at the base of the neck. The eyes were represented by fine clear garnets set in silver (Plate 40, a).

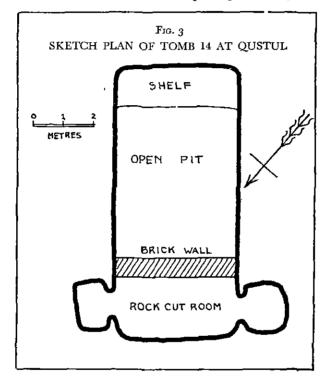
Tomb 14 (Fig. 3)

The tumulus above this tomb measured 40.88 metres in diameter and 8.95 metres in height. The tomb itself was formed by a large rectangular pit, bounded on the west side by a mud brick wall, behind which were a series of cave-like rooms which had been excavated in the hard alluvium. As with other tombs at Qustul, the interior had been completely ransacked in ancient times; the robbers forcing an entry by the usual method of tunnelling below the west side of the tumulus. However, the great pit in front of the burial chamber remained untouched and its contents with the objects found in the debris of the tumulus amply repaid us for the excavation.

Below the tumulus, on the east side of the pit, we found what was perhaps the most gruesome discovery that we had made throughout these excavations (Plate 8). Wrapped in her gaily coloured linen garments lay the naturally preserved body of a young girl, who still bore the evidence of her violent death by throat-cutting. Near the body lay a bundle of linen and a leather satchel, both of which were found to contain what were evidently her most precious possessions. We first examined the satchel, and after measuring and photographing it we attempted to lift the lid. This

was found to be impossible, for, although made of thick leather, time had reduced it to the consistency of burnt paper, and as soon as it was touched it crumbled away to powder, leaving only the lock and handles, which were of iron.

The first of the satchel's contents to claim our attention was a short iron knife with a horn handle similar to those found in Tomb 3. With the knife were two small brass bowls which were perhaps used by the dead girl to



contain toilet ointments, etc. Other toilet articles were two carved wooden kohl flasks and two iron implements for applying the kohl to the eyes (Plates 36, a and b). Both these flasks were of ancient Egyptian design, the first being in the form of the god Ra, represented as a seated mummiform figure with hands and feet exposed. On the hawk head of the god was a heavy wig surmounted by a cone which was detachable and served as a stopper of the tubular interior of the flask. The other flask was carved in the representation of a seated sphinx resting on a pedestal of the familiar Egyptian pylon form. On the human head of the sphinx was a heavy wig and filet, and the eyes were inlaid with ivory. Both flasks, which were quite small (101 and 110 millimetres in height), were perfect examples of the ancient woodcarver's art. The hardened remains of the grey-black powder, so essential for an eastern beauty's eyes, were found in both of them.

The remainder of the contents of the satchel consisted entirely of

jewellery, the most outstanding example of which was a pair of silver earrings set with precious stones. The design, which was common among the examples found at Ballana and Qustul, consisted of horns above a column of filigree work in which were set two beryls and two carnelians, with a silver ball at the base of the column. Next came four heavy silver signet rings, one engraved with a lotus design and another with the standing figure of a lion, the remaining two being plain (Plate 20). A fifth ring was studded with five beryls and five garnets. At the bottom of the satchel was a very fine necklace of silver and coral beads, a bracelet of silver wire, and numerous small studs of alabaster, silver and carnelian.

Turning our attention to the linen bundle, we found, on unwrapping it, a further collection of jewellery, principally necklaces of silver, carnelian, coral, glass and faience beads of every shape and design. The most valuable pieces, however, were two pairs of large silver earrings, both of similar design, but with different settings. The design takes the form of a silver plaque, in the centre of which is set, in one example, a large oval amethyst, and in the other a piece of green faience. Suspended from the plaque are two pendants of silver filigree work set with coral (Plate 21, b). Another interesting find in the linen bundle was a very small bracelet of silver set with five amethysts, four garnets and two beryls; perhaps the property of the sacrificed girl when a child (Plate 21, c).

Clearing the ground surface round the north side of the pit, we discovered a group of iron spear heads in perfect preservation. All were of different design and varied in length from 80 centimetres to 45 centimetres. The smallest example was inscribed on one side with Meroitic characters and on the other with figures of two seated lions. A little further west of the spears we uncovered a large wooden chest which was found lying on its side with the lid off (Plate 8). It is evident that its contents had been stolen by members of the burial party, who had been compelled to break through the lock-hasps and hinges with a chisel. The bronze lock was of the trick variety, and just as it defied the robbers so it has defied us, for owing to the fragile condition of the wood to which it was fastened we were unable to remove it to examine its mechanism. It is a magnificent piece of workmanship, with the plate elaborately engraved and the hasps terminating with figures of seated lions. The sides and back of the chest have plain panels, but the front is inlaid with ivory and ebony bosses set between a series of ivory panels engraved with mythological figures painted in red and green (Plate 48).

It is interesting to speculate whether this rifled chest had anything to do with the murdered girl. Was she caught robbing it by the burial party as they raised the mound above the tomb, and thus paid the penalty for her sacrilege, or was she an unfortunate eyewitness of the robbery who had to be removed? The balance of the evidence suggests that she was just one more ritual sacrifice customary at these burials, but the other possibility must not be overlooked.

In striking contrast to the valuable chest, in clearing round the south side of the pit we discovered a large two-handled bronze cauldron measuring 42 centimetres in diameter and 30 centimetres in height. This object may have had some ceremonial significance, but the fact that its base was still covered with the soot gathered when it was last used rather suggests that it was overlooked by the gang of workmen who raised the mound after the burial. Such is the dryness of Nubia's climate that our hands became blackened with this carbon deposit when we lifted the caldron after its long rest of about 1,500 years.

Having levelled the whole area above the tomb, we cleared the pit itself and finally, on the west side, we uncovered the brick wall which blocked the burial chambers. Our first find, in front of this wall, was a bronze hanging lamp in the form of a dove with double burners in the tail and an oil hole with a hinged triangular lid in the back. The head of the bird was turned to one side, with the feet resting on a circular base and every detail of the feathers, etc., had been engraved. The lamp could be hung from a chain attached to the back of the lid or stand on its own base.

Just below the dove-lamp we found a large spear, and a circular leather shield similar to the one recovered from the tumulus of Tomb 3. This shield had evidently seen some service, for its rim had been broken by what appeared to be a sword cut, which had been carefully repaired with small iron clasps. The spear, which measured 195 centimetres in length, had an iron blade 63 centimetres long, and a fore-shaft of silver with an iron spike butt. On cutting our way through the brick wall on the west side of the pit, we soon discovered that, as usual, the ancient plunderers had preceded us and little remained within the burial chamber and adjacent rooms beyond the scattered bones of the owner, pottery vessels, faience beads, and a glass cup.

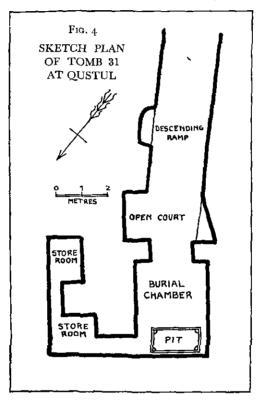
While investigating the finds in the substructure of the tomb, we had kept a gang of men at work sifting the debris cleared away from the mound for any small object that might have been missed. Their labours were rewarded with one of the few remains of dateable evidence that we were to find throughout our work at Qustul. This was a small bronze coin of the Emperor Valens, who ruled between A.D. 363-4.

Tomb 31 (Fig. 4)

The large tumulus above this tomb, measuring 48 10 metres in diameter and 7 60 metres in height, did not yield the usual series of objects that, from previous experience, we had been led to expect. After days of careful sifting, we learnt the unwelcome fact that for some reason, for which we never found a concrete explanation, only a few of the tumuli contained objects buried within them.

The tomb below this disappointing mound consisted of a series of three vaulted rooms of mud brick, built on a foundation of natural rock. Each

room, which was connected with the others by low, vaulted passages, was constructed in a separate pit cut in the alluvium and sandstone to a depth of 2.75 metres. An entrance ramp led down to a small forecourt in front of the doorway of the tomb, which we found blocked with mud brick. Unlike any other tomb at Qustul, a large pit had been cut in the floor of the burial chamber to receive the actual interment, and a ledge had been



cut round the edge of this pit to support covering stones, fragments of which we found nearby. Round depressions had been cut in the floor of the pit at each of the four corners, probably to receive the legs of a wooden bier, long since destroyed by the robbers, who had entered the tomb by their usual method of tunnelling below the west side of the tomb.

- Our first find, as we worked our way down the ramp, was an iron spear measuring 59 centimetres in length. It is probable that the whole spear had originally existed, as a bronze hafting ring and cap were found attached, but the wooden shaft had decayed. The base of one side of the blade was engraved with two figures of the god Harpocrates represented in a kneeling position and wearing the double crown of Egypt. Near the spear head lay an iron spike butt, which in all probability belonged to it, together with an iron adze blade.

Within the ramp lay the skeletons of the usual sacrificed animals; three

dogs, two camels and four horses. Bronze bells were attached to the necks of both horses and camels, and one of the former was adorned with elaborate trappings of silver chain disks and pendants. On one of the camels we found a saddle of wood and red leather, with a pommel covered with sheet silver. The front of the pommel was embossed with a design of a purely Egyptian character representing two hawks wearing the double crown and facing each other: behind each figure was a lotus flower, and between them was an altar (Plate 27, c). It is interesting to note that the figures of these hawks appear on silver crowns found in the tombs across the river at Ballana, and we have every reason to suppose that the figures on both crowns and saddles were hammered out from the same matrix (Plate 12).

In the small forecourt before the entrance of the tomb we discovered a complete bridle of silver, which was unattached to any of the animals, and gave the impression of having been thrown down just before the entrance was filled in after the burial. The head-stall, bit and reins were similar in general design to the examples found in Tomb 3, although not so well-preserved.

All the rooms inside the tomb had, as usual, been entirely ransacked, and apart from pottery vessels and the scattered bones of men and women, little of interest remained. The clearance of the plunderers' tunnel yielded two fine spear heads of iron and some gilded glass beads, which one of the robbers had probably discarded on finding them not real gold.

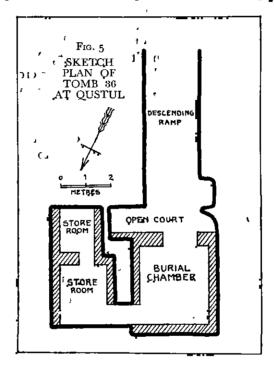
Tomb 36 (Fig. 5)

The tumulus of this tomb measured 30 metres in diameter and 6.25 metres in height. The first find in clearing above the tomb was a small circular basket-work box, which contained two bead necklaces, one of white quartz and the other of blue faience. Nearby were two silver bracelets with beaded decoration. They were formed by thick wire bent in a circle and welded together at the ends, with the beaded decoration accomplished by file work.

The substructure consisted of three vaulted rooms of mud brick built within separate pits, which had been cut in the alluvium to a depth of 3 metres. The customary entrance ramp led down from ground level to a narrow forecourt before the brick-blocked door of the tomb. A small cave-like room had been excavated in the south wall of the ramp, and in it we found the undisturbed skeletons of a male adult and a child. At the head of the ramp lay the bones of a horse with a bronze bell attached to its neck, and further down were two camels, the first with a bridle of strung cowrie shells, and the second with a silver-mounted saddle of wood and leather. The silver pommel of this saddle was embossed; on the front with a standing figure of the goddess Isis with outstretched wings, and on the back with two hawks, similar to those on the saddle on Tomb 31

(Plate 27, b). Descending the ramp we uncovered six more sacrificed animals; three horses, a camel, a donkey, and a dog.

In the plundered burial-chambers of the tomb were the scattered benes of human beings, a cow and a sheep, the animals being placed there as



sustenance for the dead. In the second room lay the skeletons of a young man, two women and a little girl, and scattered over the floor were numerous pottery vessels, with a fine bronze tripod decorated with Egyptian and classical designs.

In the third room we found more pottery vessels, undisturbed and stacked in their original position against the east wall. With them was an ivory inlaid box with bronze fittings, and fragments of numerous plates of blue and white glass.

CHAPTER VII

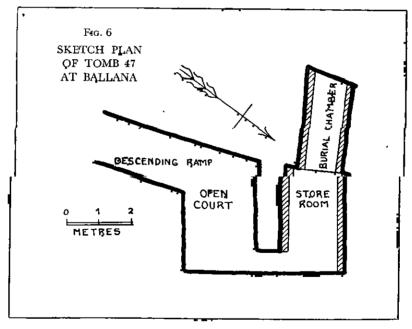
THE TOMBS OF BALLANA

HERE were 122 tombs in the Ballana group, and undoubtedly these were of a slightly later date than those at Qustul. The following are representative of these burials:

Tomb 47 (Fig. 6)

The tumulus above this tomb measured 39.30 metres in diameter, and 6.82 metres in height, and, as usual in those of the Ballana cemetery, it was covered with a layer of schist pebbles.

The removal of the mound revealed a tomb unique in design, with no



corresponding type either at Qustul or Ballana. Here a definite attempt had been made to deceive any possible tomb-robbers, and fortunately for us it had succeeded, for although the main part of the tomb had been plundered, we discovered the burial chamber intact. The tomb was formed by an entrance ramp leading down from the south into an open court, on the north side of which a small arched doorway gave access to a vaulted brick room. High up in the west wall of this room a small arched doorway

led directly into the burial chamber. After the interment this door had been bricked up and faced with plaster, so that the robbers, after searching for a possible subterranean burial place, came to the conclusion that no more rooms existed beyond that in which they stood. In many of the Ballana tombs attempts had been made to deceive possible robbers by concealing the burial below the floor level, and in each case the attempt was a failure. In Tomb 47 the architect, by placing the burial high above floor level, succeeded.

In the ramp we found the skeleton of a horse with a collar of small bronze bells and elaborate trappings of silver chain disks, and in the forecourt, near the door of the tomb, lay the remains of two sacrificed slaves. Near these human bones, which had been partly scattered by the robbers, were four objects, a bronze casket, a bronze flagon, a bronze patera, and an iron sword. The casket, which is perfectly preserved, is cylindrical in shape, measuring 10 centimetres in diameter and 14 centimetres in height. It has a single hinged lid and a rectangular lock with two hasps, above which is a loop handle. The sides of the lid are embossed with a series of duplicate figures of a horseman holding a lance. The box itself is decorated with two rows of duplicate figures: the upper row representing a kneeling figure of the god Harpocrates with the double crown of Egypt on his head, a flail in his right hand, and his left arm upraised with a finger in his mouth. The second row is composed of a standing figure of Venus with the right hand holding her hair, and the left hand holding a toilet flask. Below the lock is a panel in the form of a human mask in high relief, the eyes inlaid with blue glass, and below it is the figure of a horseman, made from the same matrix as the representation on the sides of the lid (Plate 47).

The bronze flagon, which measures 22 centimetres in height, is a particularly fine example. It is bulbous in shape with a high neck and rounded base, and must originally have been placed on a tripod. At the top of the neck is a long, horizontal spout, which opens from the mouth. The handle is formed by the rampant figure of a lion devouring the prostrate body of an animal which rests on the rim of the mouth of the flagon. The hind legs of the lion rest on a pedestal terminating in two human female faces in profile, with a fig leaf below them.

The bronze patera has a handle in the form of a human figure standing on an animal. The right arm of the figure is raised to the head and the left arm pressed to the side. On each side of the animal, and supporting the legs of the human figure, are two dolphins. The outer edge of the bowl is formed by a row of hemispherical bosses, and the interior is decorated with engraved concentric circles.

Across the doorway of the main hall of the tomb we found the skeleton of a woman, and with her four bronze bowls, an iron spear head, and a bronze incense burner. Three of the bowls are entirely plain, but the fourth, which stands on three legs, is elaborately decorated with an

embossed design of classical human heads in profile, surrounded by floral designs. The bronze incense-burner, which stands 26 centimetres in height, is in the form of a pine cone surmounting a pillar which rests on a square pedestal with four claw feet. The pine cone, in which the incense was burned, was made in two parts: a bowl and a perforated cap, held together by a hinge and a clasp. The pillar is decorated with a floral pattern in open fretwork, as is also the pedestal on which it rests. Beyond these objects, and a few pottery vessels, the room was empty, having been carefully ransacked by the plunderers.

We discovered the concealed burial chamber when we were clearing round the edge of the pit in which the tomb was built, in order to prevent the debris of the tumulus from filling it as we worked. The body, which lay in an extended position on its back, had practically disappeared, owing to moisture, but all the jewellery with which it had been adorned was in a good state of preservation. The sex of the remains was unascertainable, but, judging by the profusion of jewellery, we can be fairly certain that it was a woman, probably a Queen, for on the head was an elaborate silver crown (Plate 15, a). The crown has three crests in the form of horns, plumes and disk, which are set with round carnelians. The circlet is embossed with busts of the goddess Isis, and the rims, top and bottom, are decorated with a small beaded pattern; between the figures of Isis are large oval carnelians, and above and below, round carnelians with beaded silver settings. Over the skeleton was a mass of jewellery, and it was obvious that in life the owner could not possibly have worn it all at the same time; probably the Queen was buried with all her adornments, and those she could not wear were arranged in the correct position on her body.

On the arms we found twenty bracelets of silver, some of them entirely plain, and others of most elaborate design and encrusted with precious stones. The outstanding examples of the latter are a pair with wide hoops and large bezels, which would be certainly too heavy to wear for any long period (Plate 17, a). The hoop is made of two pieces of beaten silver, welded together and filled with hard plaster. The bezel, also of beaten silver filled with plaster, is attached to the hoop, on one side with a hinge, and on the other side with a gudgeon pin. In the centre of the bezel is a large oval onyx in a high claw setting, and around it are a series of four square beryls, four oval amethysts, and four oval garnets. The hinge and pin blocks are also set with oval garnets. The hoop of the bracelet is set with three rows of stones; the first row is composed of six oval garnets and two oval amethysts, the middle row of nine square beryls, and the third row of six oval garnets and two amethysts.

Another pair of bracelets of outstanding artistic merit from this group were made of silver, cast solid, which had open clasps in the form of lions' heads.

Round the neck was a heavy silver torque, formed by a rod of metal,

circular in section, thick in the middle and tapering towards the ends (Plate 18, b). The rod has been bent in a circular form to fit the neck. It is decorated at intervals with engraved spiral lines. With the torque were fourteen necklaces, made up of beads of silver, carnelian, quartz, jasper, olivine, obsidian, glazed steatite, faience, and glass (Plate 19, b).

On each side of the head were nine pairs of earrings, many of them set with coral and blue faience (Plate 21, a). Some of the fingers were adorned with no less than eleven silver rings, some of them plain and others set with precious stones. Three silver and four coral anklets were found on the legs, and the toes were adorned with a variety of silver rings, many of them decorated with small bezels in the form of the fly amulet.

This was by far the largest collective find of jewellery that we came upon at Ballana, and, moreover, it solved many problems, such as the use of toe rings and the position of earrings, customs of which we had hitherto been very uncertain. At each of the four corners of the burial chamber we found bronze bowls, and among other objects concerned with the burial was a small silver cup, and a bronze lamp in the form of a human head, with eyes of garnet set in silver.

Tomb 80 (Fig. 7)

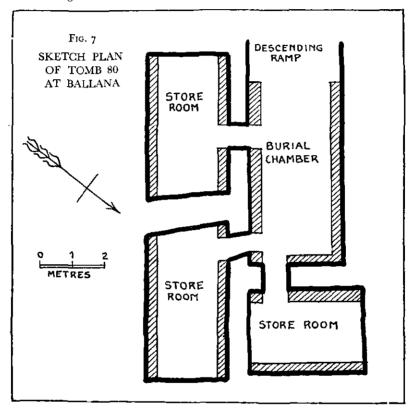
This interment was the most complete, and in a way the richest of any, in either the cemeteries of Ballana or Qustul. Spared by the early collapse of the roof from the depredations of ancient plunderers, it presented a complete burial group just as it had been left by the mourners, without any subsequent interference, and thus answered many of our most puzzling questions, such as the definite position of objects in the tombs, the placing of the body of the owner on a wooden bier, the distribution of his weapons, and the relative position of his sacrificed slaves.

The tumulus above the tomb was not very large, measuring 12 metres in height and 62 metres in diameter. The tomb, built within a series of pits cut in the alluvium, consisted of four rooms, with an entrance ramp leading downwards from the south. The pits in which the brick-built rooms were constructed were cut separately to a uniform depth of 5.87 metres below the surface of the ground. At the foot of the ramp the entrance to the tomb was blocked by a thick brick wall, resting on a foundation of sandstone blocks, the same material forming the lower vertical walls of all the rooms. The roofing of all four rooms was originally vaulted with mud brick, but owing to the action of water this was welded into one solid mass of congealed mud.

In the ramp we found the scattered bones of sacrificed horses and camels, but owing to the action of moisture little could be made of them, and it was impossible to ascertain how many animals had been placed there. In the first room, beyond the entrance, the salient feature was the skeleton of the King, which had originally been placed on a canopied

wooden bier (Plate 9). The wood of this bier had long since disappeared, but the bronze clasps which held the frame together were found still in their relative positions, held in place by the congealed mud. An exact reconstruction was thus possible, even to the extent of ascertaining the thickness of the wooden beams employed. The bed of the bier was composed of interlaced rope thongs, the impression of which was marked on bronze vessels which had been placed below it.

On the King's head was a massvie crown of silver adorned with precious



stones (Plate 12). The front of the circlet is surmounted with the head of the ram of Amon, the eyes of which are set with garnets, and an oval garnet in a beaded setting is fastened to its forehead. Above the ram's head is a high crest in the form of the "Atef" plumes, adorned with round carnelians in beaded settings of silver. The crest is flanked by a series of urai, fastened to the edge of the circlet, which is embossed with figures of a hawk wearing the double crown. This design has been taken from the same matrix as the embossed figures on the pommel of the saddle found in Tomb 31 at Qustul.

The construction of this crown presents some features of interest. The circlet is composed of two strips of sheet silver, held together on each of

the long sides by a rounded rim. They have been bent in a circular form to fit the head, and the two ends have been fastened together at the back with rivets. Only the outer sheet of silver has been embossed with the decorative designs, which have been backed with plaster. The ram's head in the front of the crown is of beaten silver, packed with plaster, and riveted to the outer plate of the circlet. The crest is composed of two sheets of silver, with a wooden core, and an iron tongue fastens it to the circlet.

On the King's left hand we found a bow guard, or bracer, of silver, and under his right hand was a silver arrow loose. The bow guard consists of a sheet of metal, shaped to cover the outside and base of the thumb, in order to give protection against the string of the bow when released (Plate 34, a). Silver rivets at the top of the guard were used to attach a small chain, which passed round the thumb when worn, and it was further secured by a leather thong at the other end, which was fastened to the wrist. The back of the guard is elaborately engraved with a series of designs representing the horns, disk, and throne of Isis; the ankh and scarab. Silver bow guards of a similar type were found in other tombs at Ballana. The archers' arrow loose, when we first discovered it, was not recognised as such, examples had been found on previous excavations, and were usually considered to be mace heads. It was only when we found them on the thumbs of other bodies that we realised what they were. This particular example was of cast silver, but others were made of almost every variety of stone. An arrow loose of a similar character was used by Mongolian archers in comparatively recent times (Plate 34, b).

Round the neck of the King were necklaces of carnelian, quartz, crystal and jasper beads, and on the arms were bracelets of silver and beadwork. Between the legs lay a short iron sword with a silver hilt and scabbard. All the swords discovered at both Ballana and Qustul were of this type. They were used only as a cutting weapon, the blunt end of the blade making a thrust impossible. The blade, which is hollow-ground, is terminated with a spike, which penetrates the wooden core of the hilt. The hilt is made of wood, covered with sheet silver, and shaped for the fingers with five hollow grooves. No pommel exists, and the top of the hilt is decorated with a precious stone set in silver. The scabbard is formed by two flat pieces of wood, held together with sheet silver embossed with a variety of patterns. The sword with the scabbard measured 45 centimetres in length. With the sword were a group of arrow looses of semi-precious stones, a small ivory tripod, and a bronze cup.

Below the head of the bier was the skeleton of a large dog, perhaps the King's favourite, who during life had faithfully guarded him in sleep and so must remain to guard him in death. Between the head of the bier and the blocked doorway of the tomb lay the skeletons of a male adult and a camel, the former lying on his back, with arms upraised as though to protect his head from the blows of the executioner. On the south side of the bier were the remains of two more human skeletons in such a

fragmentary state that it was impossible to ascertain their sex. On one of the bodies were bracelets of silver and inlaid stone, and near the other we found another iron sword with silver scabbard and hilt. Iron swords and silver-mounted iron spears were found lying in a heap in the north corner of the room, and, from their position, embedded in the congealed mud, we can be certain that some of the larger spears were originally placed in an upright position, leaning against the foot of the bier.

These iron spears, of which numerous examples were found in almost every tomb at Ballana, conform in general to two types (Plate 33). Owing to the action of water the wooden shafts had been entirely destroyed, and only the metal parts of the weapon were preserved. In the larger type the blade varies in length from 120 centimetres to 80 centimetres, with an average thickness of 6 millimetres in the centre. The mid-rib, which was welded to the blade, has in some examples been inlaid with semi-precious stones or enamel. The method of attaching the blade to the haft is unusual; the tang or spike, which is a continuation of the mid-rib, passes through an ornamental ring of cast silver, fitted into a cut-out in the base of the blade, and thence into the top of the wooden shaft. The top of the shaft is covered with sheet silver, strengthened at the bottom with silver rings. The butt of the spear is formed by an iron spike, with a socket which encloses the base of the shaft.

The blade of the smaller type of spear varies in length from 80 centimetres to 40 centimetres, with an average thickness, below the mid-rib, of 6 millimetres. As in the larger type of spear, the mid-rib is terminated in a spike, for attachment to the wooden shaft. The top of the shaft is covered with sheet silver, strengthened with a hollow cap of cast silver, and with bronze and silver rings. The base of the shaft is socketed in an iron spike butt, of the same type as that in the larger spear.

With the spears, at the foot of the bier, was a large bronze bowl, a cup and a group of forty-five archers' arrow looses made from various semi-precious stones. In the centre of the room were more bronze vessels, but by far the most interesting object in this area was an iron folding chair, similar in every respect to the modern camp-stool. The seat had been made of either leather or cloth, but, unfortuntely, it was impossible to be certain on this point owing to the decay of the material. The chair was 68 centimetres in height and 44 centimetres in width.

Below the skeleton of the sacrificed slave near the doorway of the tomb, we found the remains of a barrel-shaped toilet box of wood, with silver lock and hinges. The wood was, as usual, destroyed by moisture, but sufficient evidence remained to ascertain its size and general design. The hasps of the lock are in the form of seated lions, and the hinges are of lotus design. Within the crumbling fragments of the box was a small rectangular toilet palette of schist and three toilet spoons; one silver and the other two of bronze. A low door in the south-west corner of the burial chamber gave access to another room of similar size, with walls of stone,

and vaulted roofing of mud brick. Near the door were two large standard lamps of bronze. The first is in the form of a nude male figure, standing on a flat baluster-shaped pedestal, resting on a square base with four claw feet. The arms of the figure are extended, and each hand holds a column decorated with leaves. Surmounting each column is a circular plate on which rests a detachable lamp in the form of a dolphin. This object, which is perfectly preserved is 65 centimetres in height (Plate 37, b). The other lamp is in the form of a fluted column, with a base of three dolphin legs supported by human masks. The column is surmounted by a Corinthian capital, above which is a ring, through which is suspended a double-burner lamp, in the form of a dolphin, on top of which is the bust of a Bacchante. The pedestal and lamp together stand to a height of 80 centimetres.

Lying at the foot of the wall, on the other side of the door, we found a bronze folding tripod stand formed by three legs, rectangular in section. The tops of the legs are surmounted with goats' heads, and the ends have the usual form of lions' paws on a pedestal. Each leg is divided in the middle by loop handles, decorated with the heads of griffins. The legs of the tripod are connected by three pairs of flat diagonal bars, which are attached to the upper part by fixed projections, and to the lower part by movable rings which slide up and down as the tripod is opened or closed. The bars are loosely riveted to the rings and projections, with washers on each side, and are similarly fastened to each other where they intersect. The tripod is just over 97 centimetres in height (Plate 43, a).

At the south end of this room amidst a mass of pottery vessels, mostly broken by the falling roof, we found a variety of bronze objects. The first of these objects to be removed from the debris was a curious bulbous shaped vessel, with a high neck and three legs. The purpose of this vessel is unknown, but in principle it is similar to the Russian samovar, having a special compartment at the base in which charcoal was burned, thus heating any liquid it may have contained. As no spout exists, it is obvious that the whole vessel would have to be tipped over to remove the liquid, and this would, of course, be impossible to do without disturbing the fire. Taking this fact into consideration, I am inclined to the belief that it was used as some sort of vaporiser.

On the removal of some of the broken pottery, we found two miniature tables of bronze, in the form of a hexagonal column, on which rests a flat oblong plate. Each of the six sides of the column, and also the top of the plate, is decorated with three panels of floral and geometrical designs in open fretwork (Plate 41, b).

Behind the two tables were two incense-burners, also of bronze. The first one is designed in the form of a lion attacking a pig, upon whose back it has leapt. On each side of the pig are two small seated lions. All the figures rest on a plate, which forms a sliding lid to a box-like pedestal standing on four legs. This box has open fretwork sides, and was used to

THE TOMBS OF BALLANA

contain the incense, the fumes of which passed through the hollow bodies of the lion and the pig, to be ejected from their open mouths. The censer could be suspended if desired by a chain which was fastened at one end between the lions ears, and at the other above the tail. The whole øbject is 18 centimetres in height and 13 centimetres in length. The other incense-burner is also in the form of a lion in a standing position. The head and neck are detachable, and the incense was placed in the hollow cavity of the body, the fumes coming through the open mouth and the nostrils. The censer stands 17 centimetres in height. Both these objects are of extraordinary interest, for they show marked Chinese characteristics, particularly the standing lion (Plate 42, b).

Among other bronze objects in this part of the room were a flagon, a small filter, and a patera with a tubular handle terminating with a lion head. A large bronze cooking cauldron completed the group, and we turned our attention to the north end of the room.

The first object to claim our attention here was another large cooking cauldron of bronze, which had been placed in the north-west corner of the room. Behind it was another miniature bronze table of similar design to the two found at the other end of the room. With it were two bronze balances, a bronze weight, and a gold ring. The weighing instruments were both of the same type; the simple balance in which weight is set against weight, at an equal distance from the point of suspension. The instrument consists of a beam, with a narrow tongue in the centre, which passes between the forked ends of a suspension rod, to which it is attached at its base with a revolving pin. Two shallow pans are suspended by chains from the ends of the beam. In both cases the balance measures 30 centimetres in length. The bronze weight is in the form of a rectangular plaque of metal, with the denomination marked on one side with inlaid letters of silver. The presence of the gold finger ring lying on the floor of a corner of the room is curious, but I feel sure it has some ceremonial connection with the balances and weight. The hoop of the ring is in open filigree work and the projecting bezel is set with a round garnet (Plate 20, h).

Against the south wall of the room we discovered what was perhaps one of the most interesting features of the tomb; carefully arranged in groups were a series of large iron spear blades, axe heads, iron ingots, and iron tools, most of the latter being designed for metal working. The most essential equipment of a monarch of these troubled times in Nubia were his weapons, and here had been placed, apart from a reserve supply, the material and tools with which to make more when his armament was exhausted. Digging in 1934 at Sakkara, I discovered a similar feature in the Tomb of Hemaka, a great noble of the First Dynasty, for with him were buried a supply of flint knives and the nodules of flint from which he could renew his stock. Such is the continuity of funerary custom in Egypt, for between Hemaka and this unknown king of Nubia lies a period of nearly 4,000 years.

Apart from these tools, which consisted of hammers, saws, chisels, pincers, tongs, and metal cutters, the king was supplied with hoes, so that he might be fully equipped to cultivate the fields of the next world.

Apart from the remains of a large wooden chest, the only other objects found in this room were two bronze flagons and a bronze tripod. The two flagons are of similar design, a bulbous body, with faceted sides, a high neck with a trefoil mouth, and a slender handle with a projecting thumb piece. The bronze tripod has open fretwork sides in the form of three pillars supporting the cross pieces.

A third room, connected with the burial chamber by a stone-built door in the north wall, contained the skeleton of the Queen, who, together with the slaves who surrounded her, had been sacrificed at the burial of her consort. On her head was a silver crown, adorned with three carnelians in beaded settings (Plate 15, b). The circlet is embossed with figures of an Egyptian king, wearing the double crown and holding two vases as offerings. Above and below these figures is a pattern of rosettes. More silvermounted spears were found in this room, together with a series of large pottery water jars.

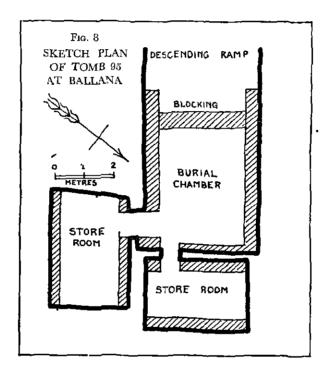
A fourth room was found, stacked almost to the ceiling with pottery wine vessels, bronze cups, and the broken remains of numerous glass bottles.

Tomb 95 (Fig. 8)

The tumulus of this tomb was considerably smaller than that of No. 80, measuring 56 metres in diameter and 7.45 metres in height. The substructure was also smaller, consisting only of three vaulted rooms instead of four. It had the usual entrance ramp leading down to it from the southwest. The walls of the rooms were built entirely of sandstone blocks, which supported a barrel-vaulted roof of mud brick, parts of which were found intact. However, most of the roofing, as in Tomb 80, had collapsed shortly after the burial, thus preserving it from robbery.

In the first room, the entrance of which was blocked by a wall of mud brick, we found that the roof had fallen sideways, throwing the body of the King off the funeral bier, which, as was customary, had been placed against the west wall. As the bones of the skeleton were articulated, we may be certain that the dislodgement of the corpse must have taken place shortly after the time of burial. A massive silver crown was found on the remains of the bier where it had remained after the displacement of the body (Plate 16). Although partly crushed, the crown was, nevertheless, preserved. As was usual, the front of the circlet is surmounted with the head of the ram of Amon, the eyes of which are set with small garnets, and an oval garnet in a beaded setting is fastened to its forehead. Above the ram's head is a crest in the form of the Atef plumes adorned with precious stones and an incised decoration. At the top of the two central plumes of the crest are two round pieces of green glass, in a beaded frame of silver, and

below them are two oval garnets in a similar setting. The tops of the side plumes are adorned with round carnelians, and the disks above the heads of the urai are set with oval garnets. In the centre of the Atef crest is a disk, in which is set a large oval garnet. The circlet of the crown is embossed with figures of the bust of an Egyptian king, or god, wearing the Atef headdress, which is set with small round beryls. Between each of the



embossed figures is an oval jewel of yellow paste, while below and above are two rows of alternate square beryls and oval carnelians.

On the right hand of the King was an archer's loose of porphyritic rock, and around his neck we found elaborate necklaces of carnelian and faience beads. Between the entrance of the tomb and the bier lay the skeletons of a sacrificed male slave and a cow, and behind the bier was the frame of an iron folding stool, which had been placed leaning up against the wall. Although of similar design to the folding chair in Tomb 80, the decoration is more elaborate. The rods to which the seat was originally attached are terminated with lions' heads in bronze, and each foot has an attachment of the same material in the form of lions' heads and feet (Plate 43, c and d).

Two large bronze bowls were found, one below the debris of the wooden bier, and one below the skeleton of the body; both were perfectly preserved. At the north end of the room we uncovered the skeleton of the Queen, lying on her side in a semi-contracted position. On her head was a silver crown unadorned by any precious stones, but embossed with figures of the goddess Isis. Near her feet was an iron sword with silver-mounted scabbard and hilt, elaborately embossed with floral designs. Behind the body were a number of silver toilet utensils, and in the north-west corner of the room lay a heap of weapons, consisting of large silver-mounted iron swords and archers' arrow looses of semi-precious stones. Apart from the usual pottery vessels, numerous bronze bowls, cups, etc., were found in the burial chamber.

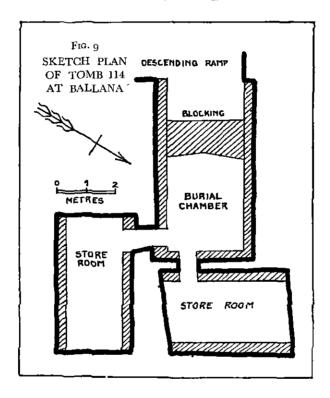
In the north wall a door gave access to a second chamber in which lay the skeletons of sacrificed slaves laid out in a row. At the west end of this room, with pottery wine jars and cups, were two large bronze standard lamps, ironically enough decorated with crosses, probably part of the plunder taken in war from Christian churches in Egypt. Over the skeletons, perhaps thrown there by the falling roof, was a large iron lamp standard, and against the east wall lay a heap of iron spear blades with a group of iron ingots, of the same type as those found in Tomb 80. A door in the east wall, with a stone lintel carved with a conventional Egyptian winged disk (Plate 10), led into a third room, which was found stacked with hundreds of pottery wine jars and drinking cups. With them were bronze flagons, bronze cups and cooking pans, and a large glass vessel, measuring 59 centimetres in height.

Tomb 114 (Fig. 9)

This tomb was almost identical in size and design to Tomb 95, the tumulus above it measuring 60 metres in diameter and 9.08 metres in height. The substructure consisted of three rooms built with stone walls, and vaulted brick roofing, which were constructed within pits 2.75 metres below the surface. The usual entrance ramp led down to it from the southwest. The entrance of the first room, which contained the burial, was blocked with two stone walls, between which was an earth filling, a method of closing the tomb which was obviously employed to deceive any possible robbers, for, breaking through the outer stone wall, they would have been faced by a mass of crumbling earth, which the builders hoped would convince them that nothing lay beyond. However, they need not have taken the trouble for, as in other tombs in this locality, the falling roof effectively preserved the burial from violation by the plunderers.

We found the remains of the wooden bier placed against the west wall of the tomb, but, as in Tomb 95, the falling roof had thrown it sideways, expelling its contents on to the floor at the east end of the room. Here we discovered the skeletons of both the King and his Queen, and from their positions it seems almost certain that they were placed on the bier together. Neither wore any jewellery beyond their crowns, which were unfortunately in a poor state of preservation, that of the King being badly crushed, while

so little remained of the Queen's crown that all our efforts with paraffin wax failed to preserve it. The King's crown followed the usual design, with a crest of Atef plumes and the ram's head. The embossed figures on the circlet are similar to those of the crown found in Tomb 95, and were probably taken from the same matrix. Both the crest and circlet are studded with beryls and carnelians (Plate 14). At the foot of the bier was



the skeleton of a sacrificed slave lying face downwards, and the remains of the King and Queen with the bones of a cow. In addition to an iron folding chair and silver-mounted spears, the burial chamber contained silver, pottery, and bronze vessels, with a decayed wooden box within which was a necklace of carnelian and quartz beads.

A door in the north wall led into a second room, the west end of which was filled to the ceiling with over a hundred pottery vessels, stacked in layers. On the floor of the east side of the room lay the skeletons of four sacrificed slaves, one of whom was wearing a heavy silver bracelet. In the north-east corner we found a large granite mortar, and a bronze standard lamp in the form of the god Eros (Plates 11 and 38, b). The figure of the god stands on a cylindrical pedestal, which rests on a square base with four claw feet. The right arm is raised, holding a vine branch which curls round the back of the neck and over the left shoulder, and on the top of the

vine branch is a circular plate on which stands a dolphin lamp. In the centre of the dolphin is a Maltese cross, an obvious later addition. Details of the elaborately dressed hair of the figure, and the veins, etc., of the vine branch have been engraved. The lamp, including the pedestal, is just over 53 centimetres in height.

Another door in the east wall of the burial chamber gave access to a third room, in which we found the skeletons of two more sacrificed slaves. Stacked in the north corner of the room was a group of pottery wine vessels, and nearby was a large pan of beaten bronze. Scattered over the floor were numerous bronze cups, a bronze lamp standard and a chalice-shaped incense burner of bronze with a domed cap, which is attached by a hinge and a clasp. The cap has an open fretwork decoration and is surmounted by a cross. On the opposite side of the room lay a group of iron ingots and a miniature table of bronze, which has an oval top with a flanged zigzag border, resting on eight reel-moulded legs.

Tomb 118 (Fig. 10)

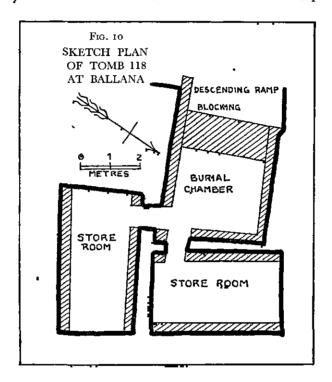
This tomb was also similar in size and design to Tomb 95, and consisted of three rooms built in pits below a tumulus which measured 54 metres in diameter and 8 metres in height. An entrance ramp led down to the tomb from the south-west. Like other tombs at the north end of Ballana, it had been preserved from robbery by the collapse of the roof.

The remains of the wooden bier were found in the usual position against the west wall of the burial chamber, and, as in other tombs, its collapse had thrown the body of the king to the floor, causing his jewel-encrusted silver crown to roll from his head. In design this crown was unique and, apart from being slightly crushed by the fall of the roof, is in almost perfect preservation (Plate 13, a). The circlet is heavily embossed with two rows of plaques of the *Uatchet* eye, the pupils of which are alternately set with green glass and carnelian. The sacred eye of the god Ra is an age-old symbol of sun worship in Ancient Egypt, and it is interesting to note its survival at so late a period. The general form of the plaques suggests that an Egyptian amulet, perhaps an hierloom, or plunder from an ancient grave, was used as a matrix by the craftsman who beat out the design. Fastened to the top rim of the circlet are a series of *urei*, with incised decoration. With the exception of three blue glass jewels in the front of the crown, all the stones are carnelians, round and oval in shape.

Below the remains of the bier we found the decayed fragments of a large wooden gaming board, with inlaid ivory decorations and bronze corner pieces. Large silver-mounted spears, with other weapons, were found, together with an Iron folding chair, leaning against the north wall. At the south end of the room lay the skeletons of a young male slave and a cow. Pottery, silver, and bronze vessels completed the contents of this room.

Penetrating the second room, we found near the entrance the skeletons

of two men and a woman, and with them an iron axe head, which was probably the weapon with which they were killed. The north end of the room was stacked to the ceiling with pottery vessels and, between this pottery and the human remains lay an interesting group of objects, scattered by the fallen roof. The first to be uncovered were a pair of bronze



standard lamps, in the form of a cylindrical column on a splay-shaped base, with three legs. The column is surmounted with a circular plate with a high rim on which rests the lamp, which has a hinged lid over the oil hole and a loop handle at the back, above which is a large cross. Near the lamps was an iron cooking tripod, and a flat iron pan with a long handle. Next came a bronze flagon and a bronze tripod, both in perfect preservation.

Lying near the entrance in the third chamber we found the skeleton of a child, with the head apparently severed from the body. Stacked against the north wall of this room was a large group of pottery vessels, behind which we found numerous bronze vessels and toilet implements of both silver and bronze. With them were two small jewellers' scales of bronze, with three weights of the same metal.

With the completion of the work of raising the Aswan Dam, our exploration in Nubia was brought to an end in March, 1934, but,

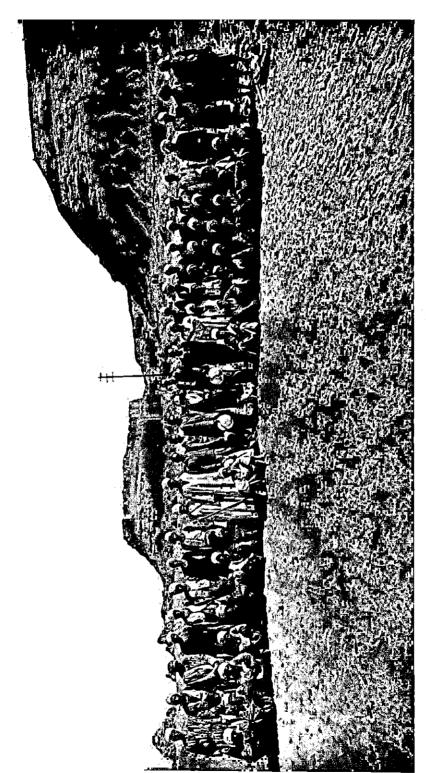
fortunately, not before we had been able to investigate every one of the 183 tombs at Ballana and Qustul. Some were disappointing, being poor or plundered, but many of them were like those I have described; intact and rich in valuable antiquities. The authorities of the Cairo Museum placed a whole gallery at our disposal, and throughout 1934 our time was spent in cleaning, classifying and finally arranging the Nubian Exhibition in the Museum, where it can be seen to day after an interval of reburial in the basements of the building during the war. After the arrangement of the exhibition came the work of publication, and many months were spent in the preparation of the scientific report on the discoveries, which was finally published by the Egyptian Government in 1938.1

Thus our Nubian adventure came to an end, leaving, for me at any rate, unforgettable memories of high hopes, disappointments and final exciting achievement. With the closing down of the Archæological Survey of Nubia, the Egyptian Government appointed me as director of excavations at North Sakkara, the work of which I started in October, 1935. Here in the Western Desent, about twenty miles south of Cairo, is the burial ground of the nobility, and perhaps the kings of the First and Second Dynasties of Egypt. Soon I was digging out the great mud brick tombs which have been built more than 5,000 years ago; buildings which were over 3,000 years old when the Blemyes of Nubia were burying the last relics of ancient Egypt under the mounds of Ballana and Qustul. Such is the frequent experience of the Egyptological explorer, who often finds himself, within a short space of time, investigating the first and last chapters of ancient Egypt's history.

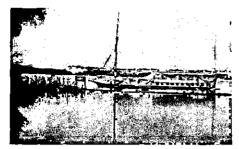
¹ Emery, The Royal Tombs of Ballana and Quetul, Service des Antiquités de l'Egypte, 1938.

PLATES

	•		
		•	



The staff and chief workmen of the expedition on the last day of the excavations at Ibrim on Feb. 9th, 1934





The Dahabieh "Zinet El Nil"

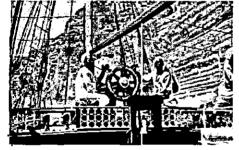
On the top deck of the "Zinet El Nil"



The mizzen sail

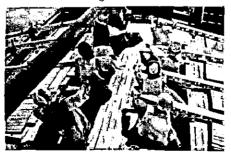


The main sail

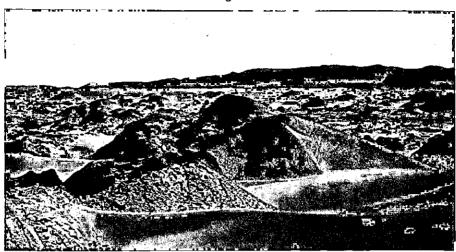




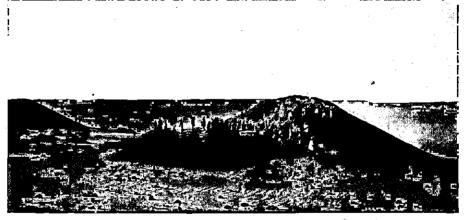
Sailing Southward



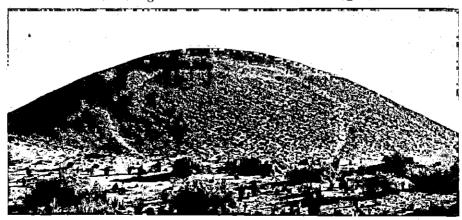
The rowing-pits on the lower deck



The tumuli at Ballana as we first saw them on Nov. 3rd, 1931



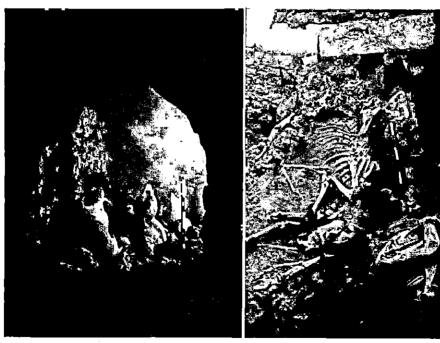
Removing the tuniulus above Tomb 2 at Qustul



One of the larger tumuli at Ballana

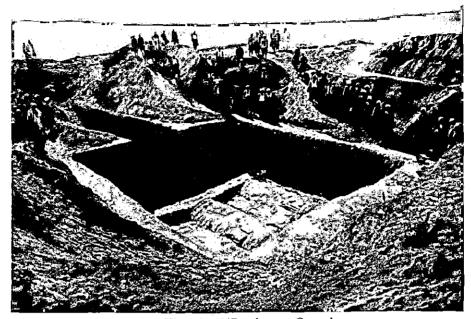


A. The tumulus of Tomb 14 at Qustul showing the entrance to the robbers' tunnel after re-excavation

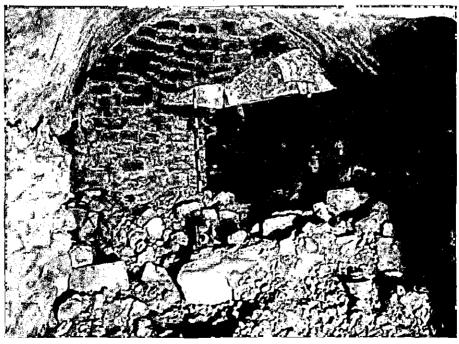


B. Our first view of the interior of C. The bones of sacrificed horses
Tomb 2 at Qustul through the in the pit before the entrance of robbers' tunnel

Tomb 2 at Qustul



A. The pit of Tomb 3 at Qustul, after the removal of the tumulus, showing the vaulted roof of the tomb



B. Interior of Tomb 3 at Qustul as left by the robbers



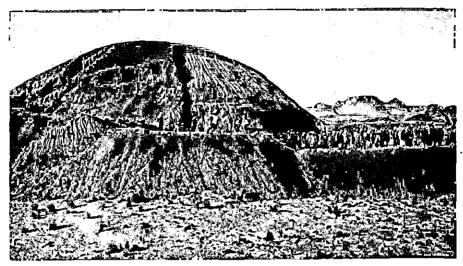
The Forecourt of Tomb 3 at Qustul after excavation The door at the far end of the Court led into the room in which we found the horses with their jewelled bridles. The foot of the entrance ramp is on the left





Bronze and silver flagons
found in Tomb 3 at
Qustul

C. Silver vessel in the form
of a water-skin in Tomb 3
at Qustul



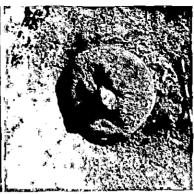
Removing the tumulus above Tomb 3 at Ballana



Removing the tumulus above Tomb 10 at Ballana



Wooden gaming board lying face downward in the debris of the tumulus above debris of the tumulus of Tomb 3 at Qustul

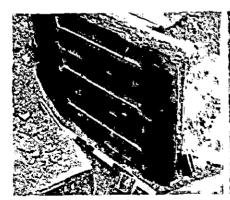


Temb 3 at Qustul





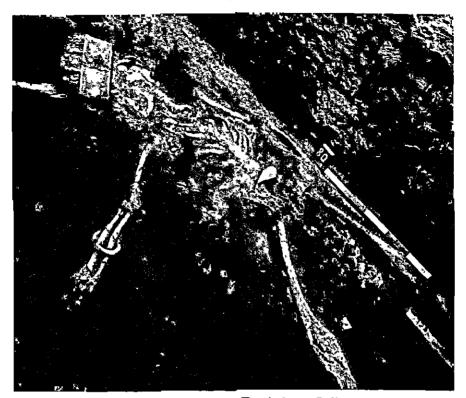
Fragment of leather armour Skeleton of a sacrificed horse with its silver from Tomb 3 at Qustul trappings in position



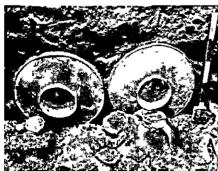
Overturned chest in the debris of the tumulus above Tomb 14 at Qustul



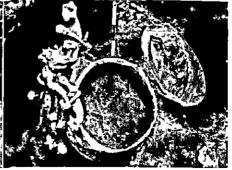
Body of the sacrificed girl above Tomb 14 at Qustul



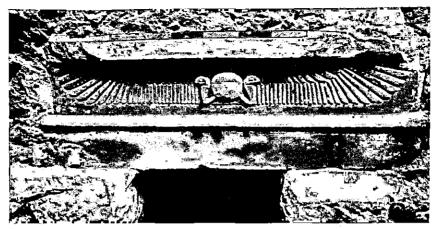
Skeleton of the King in Tomb 80 at Bailana (Note the fragile condition of the bones owing to moisture)



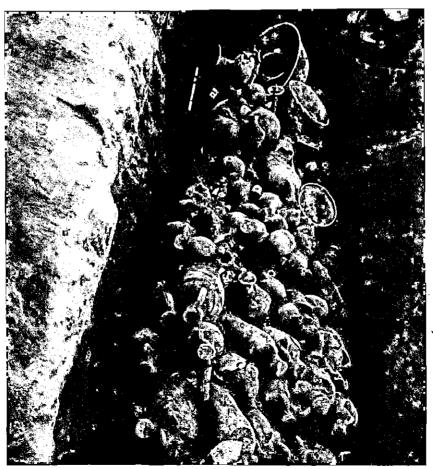
Large silver dishes as found in Tomb 3 at Ballana



Bronze standard lamps and pans as found in Tomb 3 at Ballana



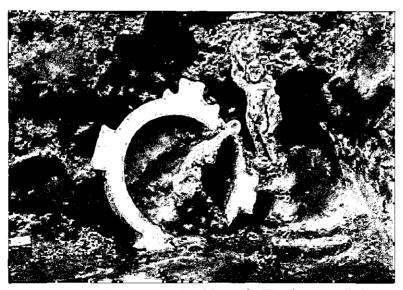
Doorway in the Burial Chamber of Tomb 95 at Ballana



Pottery wine jars, bronze lamps, bronze cups and bowls, as found in a store room at Tomb 121 at Ballana



Pottery wine jars and bronze vessels in Tomb 9 at Baliana



Stone bowl and bronze standard lamp in Tomb 114 at Ballana

This silver crown was found on the head of the King in Tomb 80 at Ballana. The design is purely Meroitic and almost identical with those shown on the figures of the kings and queens in the reliefs of Bagrawiya and Nagaa in the Sudan. It is possible that the custom of encrusting the crown with masses of precious stones was due to Byzantine influence, but the form and symbolism is undoubtedly a survival of Meroe and Ancient Egypt. The front is surmounted with the head of the Ram god of the Sudan, the eyes of which are set with small garnets, and an oval garnet in a beaded setting is fastened to its forchead. The crest takes the form of the plumes of Amon-Re, and is adorned with round carnelians in beaded silver settings. Flanking this crest are z series of uraei, which are fastened to the edge of the circlet. The circlet, which bears no precious stones, is embossed with figures of a hawk wearing the Double Crown of Egypt, and above and below these figures is a heavy bead pattern.

The construction of the crowns are all similar to this one. The craftsman first took a sheet of silver on which he beat out the design, probably on an iron matrix. He then backed it with a second sheet of silver, filling the space in between with plaster, which gave a solid body behind the embossed designs. While the plaster was soft the double plates of silver were bent into a circlet to fit the human head, and the two ends were riveted together at the back. A roll-rim of silver was soldered round the edge of the circlet, and the ram's head of beaten silver filled with plaster was fixed to the front with rivets. The crest was first carved in hard wood and then covered with sheet silver, and was secured with an iron tongue which was socketed between the two plates of the circlet. The precious stones were set in silver frames backed with plaster, and were attached to the crest with an adhesive.



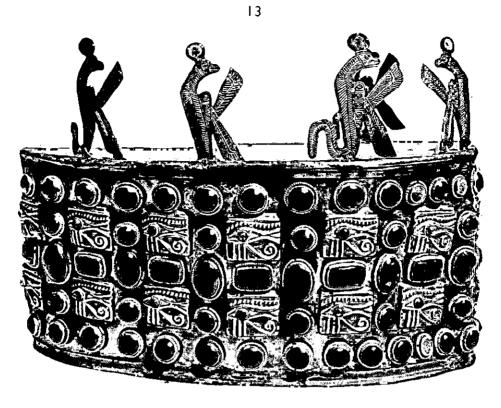


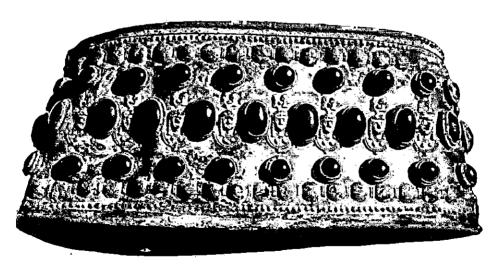
A

This silver crown which was found in Tomb 118 at Ballana, was discovered in almost perfect preservation, apart from the fact that the circlet had been badly bent by the falling roof of the tomb. Fastened to the rim of the circlet are a series of winged uraei with incised decorations. The circlet is heavily embossed with two rows of plaques, on which is depicted the conventional Sacred Eye of the Egyptians, the pupils of which are alternately set with green glass and carnelians. With the exception of three blue glass jewels in the front of the crown all the stones are carnelian; round, oval and semi-rectangular, in beaded settings of silver.

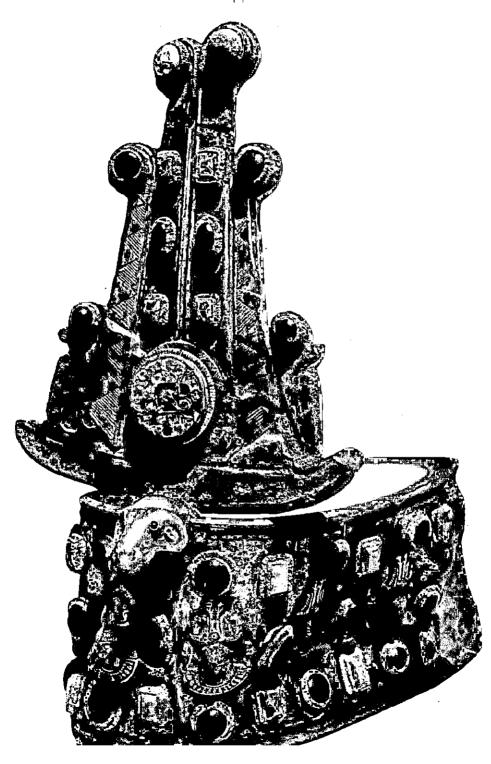
В

This silver crown was found on the head of the King in Tomb 6 at Ballana. The circlet is embossed with a series of busts of the Goddess Isis wearing the Atef headdress and a heavy bead collar. Between each figure are oval carnelians, all in beaded silver settings. The edges of the circlet are decorated with a heavily embossed bead pattern.





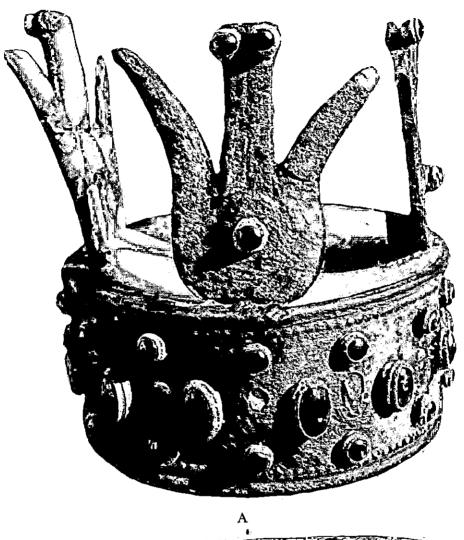
This silver crown was found near the body of the King in Tomb 114 at Ballana. The eyes of the ram's head are set with green glass, and at the top of the two central plumes of the crest are two round jewels of yellow paste, while below them are four square beryls and two oval carnelians in the usual beaded settings. The tops of the outer plumes are set with round carnelians, as are also the disks above the uraei. The disk in the centre of the crest is a separate piece in the form of a beaded medallion set with coloured glass. The circlet is heavily embossed with a series of busts of an Egyptian god or king wearing the Atef crown. Between each of these figures are large oval carnelians, while above and below are alternate round carnelians and square beryls.

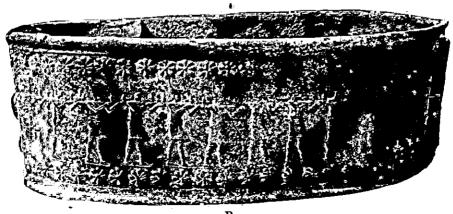


Α

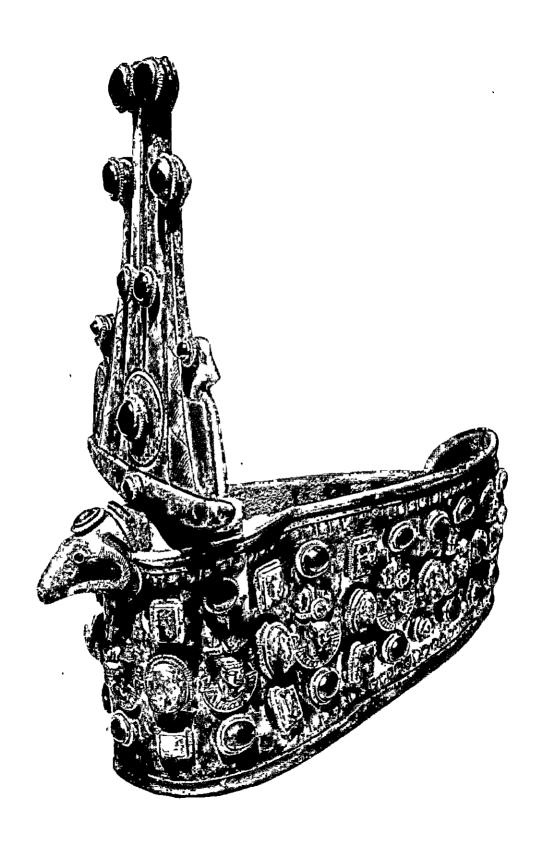
This silver crown was found on the head of the Queen in the burial chamber of Tomb 47 at Ballana. The three crests in the form of the Horus plumes and disk are set with round carnelians. The circlet is embossed with busts of the goddess Isis, taken from the same matrix as that of the crown found in Tomb 6. Between the figures of Isis are large oval carnelians, and above and below are round carnelians, all in beaded silver settings.

This silver crown was found on the head of the Queen ic Room 2 of Tomb 80 at Ballana. The front is adorned with three large carnelians in beaded settings of silver. The circlet is embossed with standing figures of an Egyptian king wearing the Double Crown and holding two vases as offerings. Above and below these figures is a pattern of rosettes.





This silver crown was found on the head of the King in Tomb 95 at Ballana, badly crushed by the falling roof. The front is surmounted with the usual ram's head, the eyes of which are set with small garnets, with an oval garnet in a beaded silver setting fastened to its forehead. At the top of the two central plumes of the crest are two round pieces of green glass in beaded frames of silver, and below them are two oval garnets in a similar setting. A round carnelian is set in the middle of the disk, and an oval garnet in the centre of the horns. The circlet is embossed with figures of the bust of an Egyptian god or king wearing the Atef crown and a collar terminated with uraei. This design is taken from the same matrix as that of the crown found in Tomb 114. Each of the disks of the Atef crowns on these figures is set with small round beryls. Between each of these embossed figures is an oval jewel of yellow paste, while above and below are rows of alternate square beryls and oval carnelians.



٨

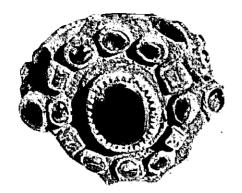
Pair of heavy silver bracelets encrusted with precious stones, which we found on each wrist of the queen in Tomb 47 at Ballana. The hoop is made of two pieces of beaten silver soldered together and filled with hard plaster. The bezel, also of beaten silver filled with plaster is attached to the hoop on one side with a hinge and on the other with a gudgeon pin. In the centre of the bezel is a large oval onyx in a high claw setting, and around it are a series of four square beryls, four oval amethysts and four oval garnets. The hinge and pin block are also set with garnets, and the hoop of the bracelet is encrusted with square beryls, oval garnets and amethysts. One bracelet is 92 mms. in diameter and the other 95

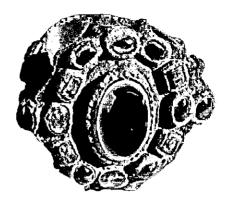
В

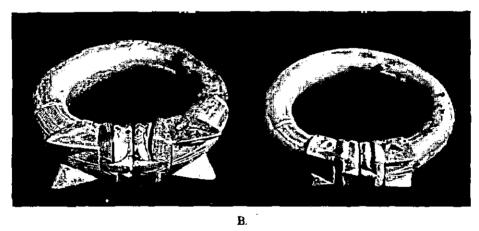
Two solid silver bracelets found on the left wrist of the king in Tomb 6 at Ballana. The clasps are in the form of conventional lion heads. This was a fairly common type of bracelet found in the Ballana tombs. In the making they were cast and filed, with the details of the lion heads engraved. One bracelet is 95 mms. in diameter and the other is 90 cms.

 \mathbf{C}

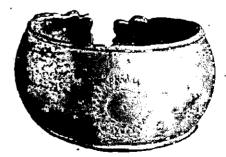
Pair of bracelets of cast silver, found on each arm of the Queen in Tomb 47 at Ballara. The open clasps are in the form of lion heads, and in the middle of the hoop is an engraved rosette design. Both bracelets are 93 mms. in diameter.











C:

Α

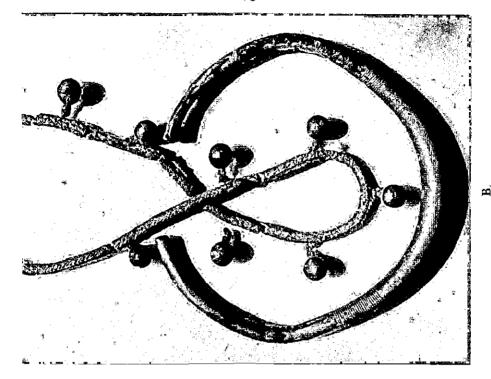
The top necklace is composed of silver pendants and carnelian ball beads, and the lower one is entirely of silver. Both were found on the neck of the Queen in Tomb 47 at Ballana.

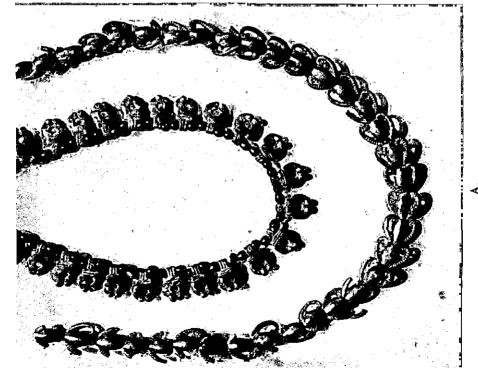
F

The necklace is in the form of a plaited silver chain with ball pendants attached at intervals. The chain is made of silver wire, and the ball pendants are formed by two hollow cups with a plaster filling.

The silver torque is made from a rod of metal, circular in section, thick in the middle and tapering towards the ends. It is decorated at intervals with engraved spiral lines.

Both the necklace and torque were found on the neck of the Queen in Tomb 47 at Ballana.





Α

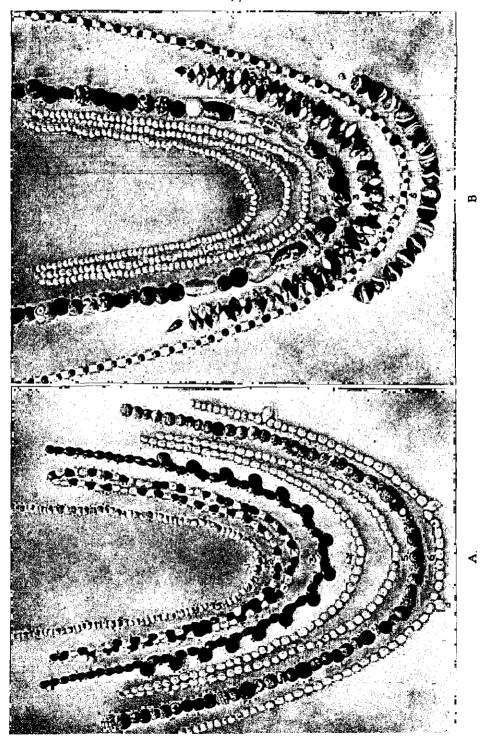
Bead necklaces. The first five were found on the Queen in Tomb 47 at Ballana, and the sixth scattered on the floor of Room 1 in Tomb 73 at Ballana.

- 1. Blue faience.
- 2. Obsidian, carnelian and white quartz.
- 3. Carnelian.
- 4. White quartz.
- 5. Yellow and green faience; yellow, red and green glass; and mottled black and white porphyritic rock,
- 6. White quartz.

В

Bead necklaces. The first one was found in Room III of Tomb 121 at Ballana, and the other four in Room I of Tomb 122 at Ballana

- 1. White quartz.
- 2. Carnelian, porphyritic rock, white quartz, amethyst, faience and glass.
- 3. Green marble, carnelian, yellow jasper, white quartz, obsidian and porphyritic rock.
- 4. Carnelian and white quartz.
- 5. Onyx.



A

Necklace of gold beads and gold pendants. Found in Temb 3 at Ballana. 42 cms. in length.

В

Heavy ring of cast silver with a solid projecting bezel, the concave surface of which is engraved with a conventional lotus design. It was found in a leather bag near the body of the sacrificed girl under the tumulus of Tomb 14 at Qustul. Length with bezel 33 mm.

C

Heavy ring of cast silver with a solid projecting bezel, the flat surface of which is engraved with the figure of a lion. Found with the lotus ring (FIG. B) in Tomb 14 at Qustul. Length with bezel 29 mm.

D

Silver ring with hinged bezel. The hoop is made of two pieces of beaten silver soldered together, and is set with five beryls and five garnets. The bezel is also of beaten silver and is attached to the hoop on one side with a hinge and on the other with a gudgeon pin. Over the hinge and pin block are set two garnets. The bezel is decorated with a square-cut beryl in a claw setting surrounded with a rope-pattern border made with silver wire, and around the edge are set two garnets, three turquoise and three sapphires. The ring, which measures 25 mm. in diameter, was found in the sacrificed girl's leather bag in Tomb 14 at Qustul.

E

Silver ring with an oval bezel in which is set an engraved gem depicting two human figures on each side of an altar, below which is a tree and an animal. The ring, which measures 22 mm. in diameter, was found on the left hand of the Queen in Tomb 47 at Ballana.

F

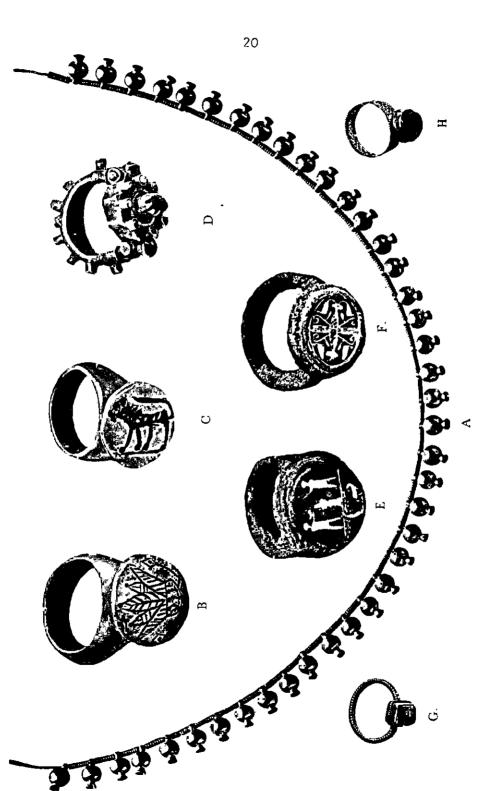
Silver ring with a round bezel in which is set an Egyptian seal of steatite. It measures 25 mm, in diameter. Found in Room I of Tomb 2 at Ballana.

 \mathbf{G}

Gold ring with a square bezel in which is set a beryl. The sides of the bezel are decorated with a beaded pattern, and the exterior sides of the hoop with grooved lines. It measures 23 mm. in diameter. Found in the robbers' passage in Tomb 2 at Ballana.

H

Gold ring with open filigree hoop and an oval projecting bezel set with a large garnet. It measures 20 mm. in diameter. Found in Room IV of Tomb 80 at Ballana.



Α

1. Pair of silver earnings in the form of norms from which are suspended Ankh pendants. 40 mm. in length.

2. Pair of silver earnings in the form of horns with a fluted vase-shaped column, to the bottom of which is attached a ball. 3 cms. in length.

3. Pair of silver earrings in the form of horns without pendants. 18 mm. in length.

4. Pair of silver earrings in the form of horns above a large coral bead, attached to the bottom of which is a silver ball. 50 mm. in length.

5 & 6. Two pairs of earrings set with blue faience. 44 mm. in length.

7. Pair of silver earnings in the form of horns above a fluted vase-shaped column, to which is attached a ball. 36 mm. in length.

8. Pair of silver earrings in the form of double horns above a large coral bead, attached to the bottom of which is a silver ball. 50 mm. in length.

Pair of silver earrings in the form of double hores above a column
of filigree work, to the base of which is attached a ball. 46 mm. in
length.

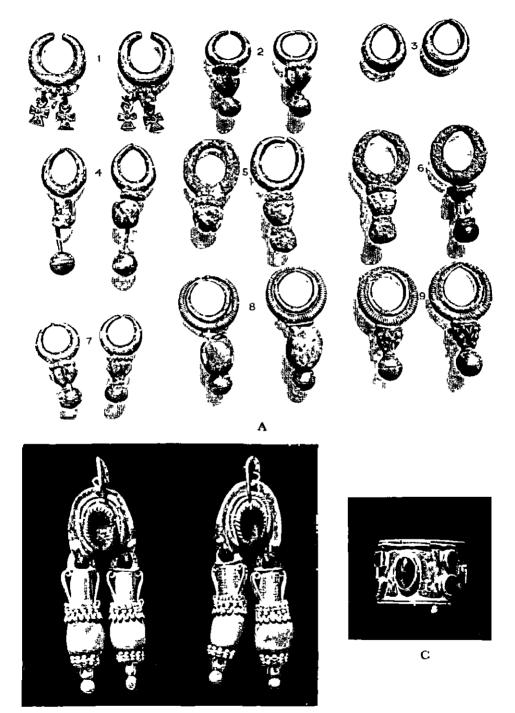
All the earrings were found with the body of the Queen in Tomb 47 at Ballana.

P

Pair of large silver earrings in the form of a plaque in which is set an oval amethyst in a claw setting. Suspended from the plaques are two perdants of filigree work, set with coral. Soldered to the back of the plaque is a large hoop for attachment to the ear. 95 mm. in length. Found in a linen bundle near the body of the sacrificed girl in Tomb 14 at Qustul.

C

A child's bracelet of silver set with precious stones which was found with the earrings (FIG. B) in Tomb 14 at Qustul. It is composed of a strip of silver bent in a circular form and joined with a detachable pin, which passes through three tubes. The stones, five amethysts, four garnets and two beryls are set in plain silver frames. 37 mm. in diameter.



В

Α

This large silver dish was found with another of similar size in Room III of Tomb 3 at Ballana. It has been cast and engraved, and has a shallow foot ring, which was attached with solder. The surface is embossed with a figure of the god Hermes, who is represented in the semi-nude seated on a globe. On his head is a corn measure between two wings, and in his upraised right hand he holds out a bowl to a serpent, which is coiled around a tree, from one of the branches of which hangs the lion skin of Hercules. The left hand of the god holds an ear of corn, and attached to his ankles are the wings of Mercury. Below the globe on which he is seated, are the hammer and pincers of Vulcan, and the armour and shield of Mars. Behind him is the figure of a griffin with one fore-leg outstretched to support the globe. A curious feature is the crude attempt that has been made to engrave a halo around the head of the god. The plate measures 38.8 cms. in diameter.

н

This silver incense burner was found with the plates in Tomb 3 at Ballana. Chalice-shaped, it has a domed cap which is attached with a hinge and clasp. The cap is decorated with an elaborate floral pattern in engraved open fretwork, and is surmounted with a ring for suspension. It is 14 cms. in height.

C

This silver cup with concave sides and rounded base was found in Room I of Tomb 114 at Ballana. It is decorated below the rim with an engraved rope-pattern. It is 9 cms. in height. We found numerous silver vessels of this type, usually associated with the actual burials.

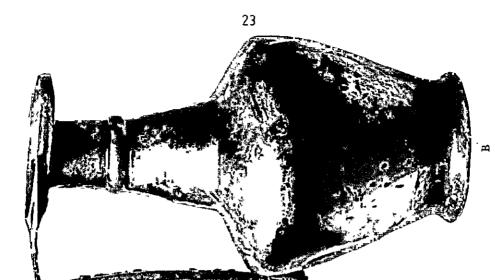


A

This silver bowl with a roll rim and lew foot ring was found with other silver vessels in Tomb 3 at Ballana. The inside is vertically fluted, with a circular centre-piece surrounded with a beaded edge. The centre-piece is embossed with a design of doves and fishes around a rosette. The bowl has been beaten and engraved, and the foot ring was attached with solder. It measures 26.5 cms. in diameter.

B

This silver flagon was found with one of bronze of similar type, in front of the door of Tomb 3 at Qustul. It has a wide exterior rim and high neck which tapers outwards to the shoulders. The sides of the body of the vessel are straight and taper inwards to a low foot ring. The handle, which is of cast silver, is attached with solder. It measures 22 cms. in height.





A

These two ewers of beaten silver were found together in the debris of the tumulus above Tomb 2 at Qustul. The slender handle, which has been cast and filed, is octagonal in section, and has a heart-shaped thumb-piece with a spherical boss at the top. It is attached to the body of the vessel with solder. The mouth, middle of the neck and the foot have been decorated with engraved parallel lines. Both ewers measure 25 cms. in height.

B

Spouted silver cup found in Room I of Tomb 14 at Ballana. The body of the vessel was lathe-turned, and both the foot and the spout were attached with solder. This type of cup was fairly common at Ballana, but the other examples are all of beaten silver. It measures 10 cms. in height.



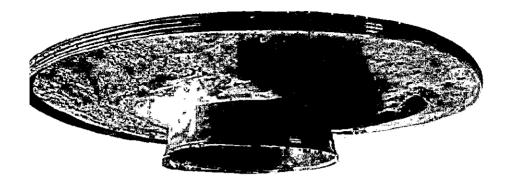


A

A large silver dish with shallow foot ring and heavy exterior rim with a decoration of grooved parallel lines. The dish has been cast and then turned on a lathe, and the foot ring and rim have been attached with solder. It measures 39 cms. in diameter. Found with other silver vessels in Room III of Tomb 3 at Bailana.

B

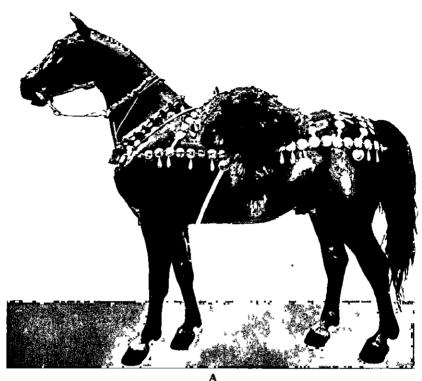
This silver vessel was found in Room I of Tomb 118 at Ballana. The cup, which is lathe-turned, has a rounded base and is decorated below the rim with an engraved trellis-pattern. The lid of beater silver has the knob attached with solder. With the lid, the vessel measures 12.6 cms. in height.

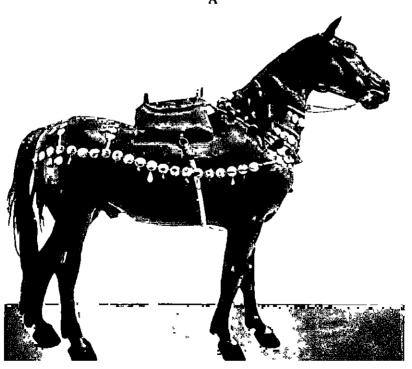


A



Two mode! horses in the Cairo Museum equipped with trappings, etc., found in the Qustul tombs. The leatherwork of the saddles and the blue-dyed sheep skin are restorations, as are also the leather straps attached to the silver trappings. The bridles, bits and reins are all of silver, and the bells around the neck are of bronze. Nearly all the horses found in Oustul had collars of cowrie shells.





Α

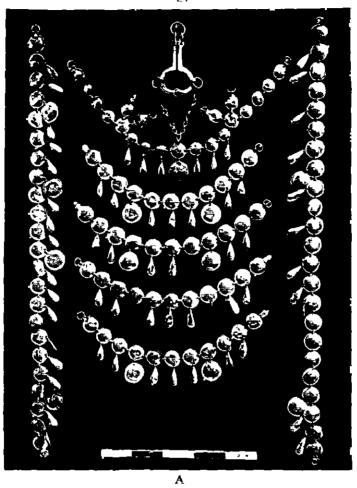
A complete set of silver horse trappings found in the forecourt of Tomb 2 at Qustul. They consist of chains of flat or slightly convex disks from which are suspended drop-pendants and disks. The ends of each chain have a buckle and a tip, to which the fastening straps were attached. The system of mounting the trappings on the animals was the same in every case, and only varied in quantity and richness.

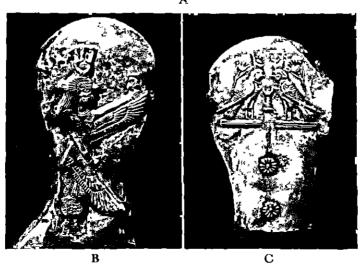
Þ

The silver-mounted pommel of one of the saddles found in Tomb 36 at Qustul. The front is embossed with a figure of the goddess Isis with outstretched wings.

C

Another example of one of the silver-mounted saddle-pommel found in Tomb 3: at Qustul. It is embossed with a design of two hawks wearing the Double Crown facing each other. Behind each hawk is a lotus flower and between them an altar. Below this group are two rosettes. It is interesting to note that the figures of the hawks have been made from the same matrix as that of some of the crowns at Ballana.

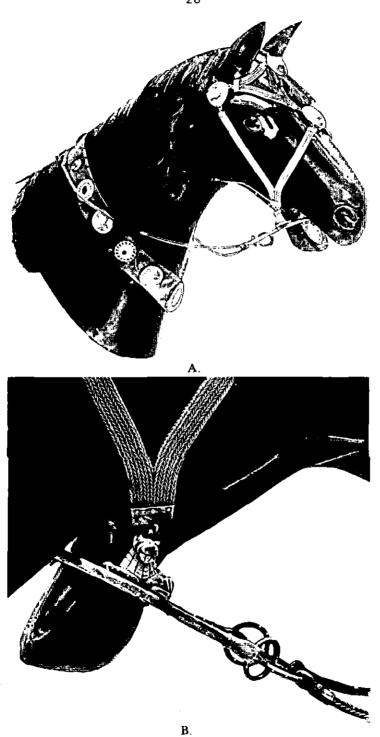




Α

Complete bridle composed of head-stall, reins and bit. One of three found on the horses in Tomb 3 at Qustul. The head-stall is composed of heavy silver ribbon chains, joined by four lions' heads of silver at points behind the ears, on the forehead and in the middle of the nose. These lion-head medallions are made of beaten silver filled with plaster, with inlaid eyes of lapis lazuli and tongues of ivory. The bit, which is of cast silver, is attached to the head-stall with two hinges fastened to seated lions riveted on to each side of the curved ends. The straight ends are terminated with human hands, which hold the rein rings. The reins are made of silver rope-chain, and measure 73 cms., double length. The horse collar is of red leather (restored) set with jewelled silver medallions. (See, PLATE 30.)

This shows the details of the silver bit described above.

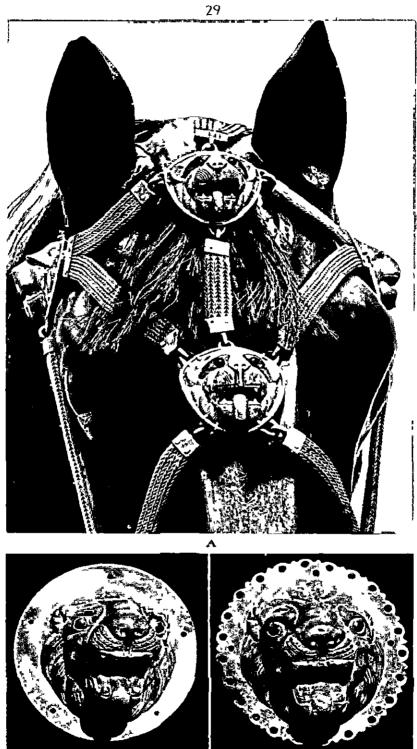


A

Detail of one of the head-stalls found in Tomb 3 at Qustul. They are all perfectly preserved; the silver chainwork being as flexible as the day on which it was made.

B

Two of the lion-head medallions from the horse collar found in Tomb 3 at Qustul. They are made of beaten silver backed with a hard plaster. The eyes are set with garnets. Each medallion, of which there are five, measures 58 mms. in ciameter.



Medallions of silver from a horse collar of red leather found in Tomb 3 at Qustul. The leatherwork was too fragile for removal, but the position of the medallions was ascertainable. (See PLATE 28A.)

A

Made of beaten silver with a backing of hard plaster. In the centre a claw setting holds a large scarab of blue saience. The border of the medallion is set with three garnets, seven beryls and two moonstones. Size 80 mm. by 65 mm.

В

Made of cast silver which has been engraved and filed. Fretwork pattern with "cord" setting for an onyx cameo of the bust of a Roman Emperor. Size, 73 mm. by 62 mm.

c

Made of cast silver which has been engraved and filed. Fretwork pattern with "cord" setting for an oval onyx. Size, 74 mm. by 62 mm.

D

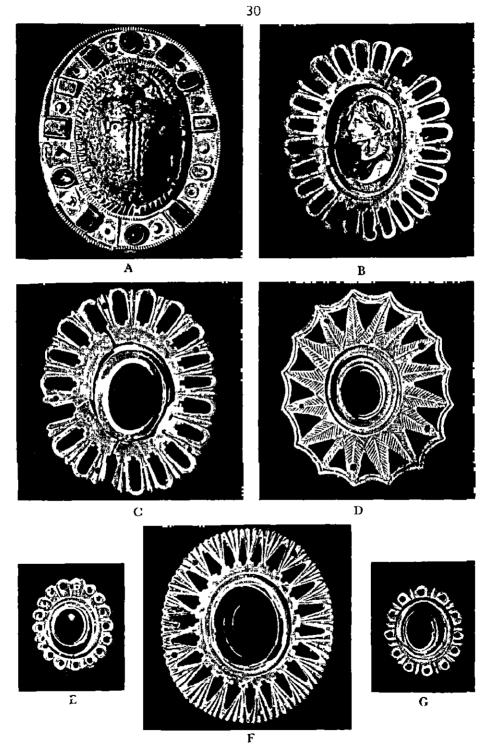
Made of cast silver which has been engraved and filed. Fretwork pattern with "co-d" setting for an oval onyx. Size, 70 mm. by 61 mm.

Е&с

Made of cast silver which has been engraved and filed. Fretwork pattern with an ovar red and white onyx in a "cord" setting. Size, 33 ram. by 28 mm.

7

Made of cast silver which has been engraved and filed. Fretwork pattern with a "cord" setting holding an oval onyx. Size 70 rm. by 61 mm.

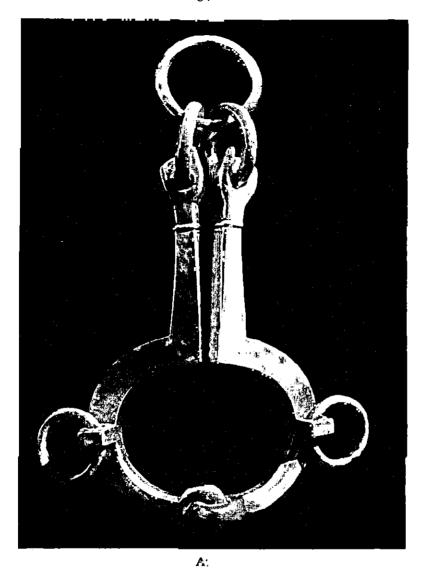


A

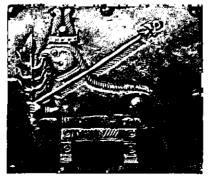
Silver bit from Tomb 2 at Qustul. Eits of this type were andoubtedly of native design and construction. They were made either of iron or silver, and although the latter were undoubtedly used only on ceremonial occasions trey were, nevertheless, not just votive offerings but gave practical service for on many examples teeth marks were plainly visible. The bit is composed of two separate parts in the form of a semi-circular curve at one end and a straight rod at the other. The curved ends are hinged together at the top, and thus form a circular hole through which the lower jaw of the animal is passed. The two straight rods are joined at the end by a wide ring to which is attached the reins, and side rings are placed for attachment to the cheek-pieces of the head-stall (Plate 28B). The whole contraption opens and closes with the pull on the reins, and would form a brutal curb to the most fractious herse. The example shown measures 20 cms. in length.

Б

The two silver plaques found in Tomb 17 at Qustul probably formed part of the decoration of a wooden casket. They are embossed with the figure of a composite Mercitic god in the form of a hawk-headed crocodile with the arms of a man and the hind legs of a lion. The figure is seated on an altar decorated with lines and circles. On the head rests a crown with the "Atef" plumes and disk, and the hands hold a flower or tree, and a long feathered staff at the end of which is an "Arch." Representations of this strange deity are shown on the walls of the temple of the Mercitic Oueen. Amentarit, at Nagaa in the Sudan.







A

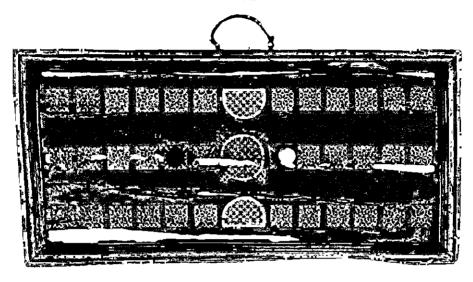
This wooden gaming board was found face downwards on the surface at the side of the pit of Tomb 3 at Qustul. Below it was a leather bag which was found to contain fifteen ivory and afteen enony gaming pieces, a dice box and five dice. The board is composed of a single piece of wood with a framed border, strengthened at the corners with silver brackets attached with small silver nails. The loop-handle, which is also of silver, is fastened to the frame with gudgeon pins. The places are marked with delicate fretwork ivory inlay. The gaming board measures 77.5 cms. by 37 cms.

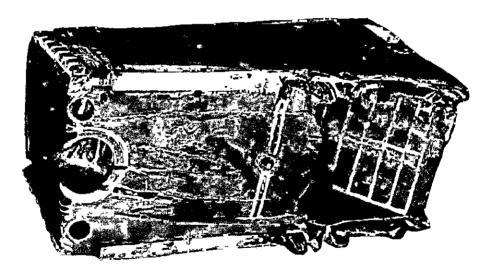
B

This dice box of wood with silver fittings was found in fragments in the leather bag mentioned above, and it was not until days of puzzling work had been spent upon it that we were able to recognize its function. The design is very original and prevents all possibility of cheating. It was not shaken at play, but the dice were dropped in through the open top, where they fell on a series of grooved boards, which turned them over before discharging them through the opening at the bottom. On each side of the opening are two carved dolphins. These dice boxes were in common use by the Romans as late as the 5th century. Size, 16 cms. by 7 cms. by 8 cms.

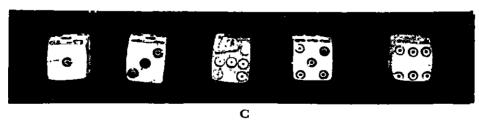
C

Five cube-shaped dice of ivory. Found with the dice box. They are marked from one to six with tubular drill holes filled with red paint. There is no doubt that these dice were used with the board and gaming pieces in a game which was similar to the so-called draughts of the Egyptians. The exact method of play is unknown, but it is certain that the dice were thrown to determine the moves on the board as in the game of backgammon.





В

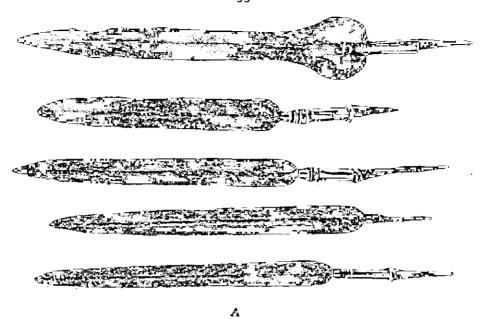


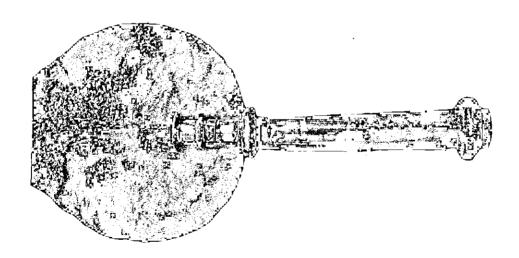
Α

Nearly every tomb at Ballana contained dozens of large spears, of which these examples, from Tomb 80, are typical. They were usually placed in an upright position against the foot of the bier on which lay the body of the owner. The iron blades vary in length from 120 cms. to 0.70 cms., with an average width of 5 cms. in the centre. The mid-rib, which was welded to the blade, has in some cases been inlaid with precious stones or enamel. The method of attaching the blade to the shaft is unusual, the tang or spike, which is a continuation of the mid-rib, passes through an ornamental cylinder of cast silver fitted at the base of the blade to the wooden fore-shaft. The fore-shaft is covered with sheet silver, strengthened at the top and bottom with silver rings.

B

Detail of silver fore-shaft.



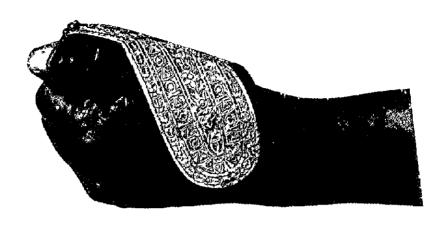


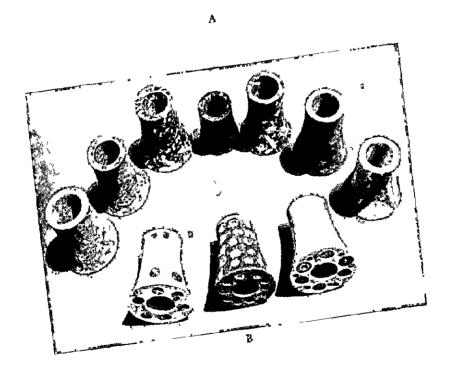
A

This silver bracer was found on the left hand of the King in Tomb 80 at Ballana. Bracers were placed over the left thumb of the archer in order to give protection against the string of the bow when released. They were cut from a piece of sheet silver and bent to fit the hand. Silver rivets on the thumb-piece were used to attach the chain which passed round the thumb of the user, and two small holes were bored at the end of the wings, probably for a leather thong for attachment to the wrist. All the bracers found have engraved decorations which vary considerably. On the example shown there are a series of designs representing the horns, disk and throne of Isis, the Ankh and scarab.

В

The purpose of these objects is uncertain, but it is probable that they are some form of archers arrow loose. In three of the tombs we found specimens on one of the digits of the right hand of the main burial, and in other cases they were frequently placed near the right hand. Hundreds of examples were found made of a variety of material, such as siver, wood, porphyritic rock, marble, red and yellow jasper, agate, alabaster, serpentine, quartz, porphry, etc. The examples shown were found in Tomb 95 at Ballana, and three of them are inlaid with coloured pastes.





Α

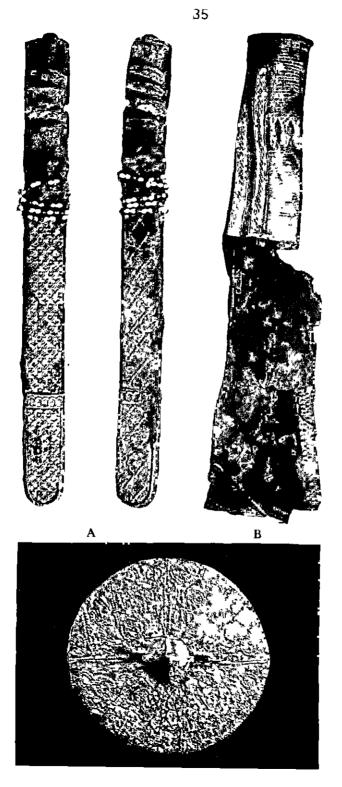
This sword was found in Tomb 9 at Ballana. All the swords discovered both at Baliana and Qustul are of the same type and are made of the same materials. They were used only as cutting weapons, the blunt end of the blade making a thrust impossible. The iron blade, which is hollow ground, is fastened by a tang wnich penetrates the wooden core of the hilt. The hilt is made of wood covered with sheet silver and shaped to fit the fingers with five hollow grooves. No pommel exists, and the top of the hilt is usually embellished with a precious stone set in silver. The scabbard is formed by two flat pieces of wood held together with sheet silver embossed with a variety of designs. The average length of these weapons is 45 cms.

∉ ₽

Arrow quiver of stamped leatherwork found in Tomb 3 at Qustul. Although such quivers were in common use among the Blemye people this was the only one found complete. At Qustul, where the tombs had been plundered and re-plundered only torn fragments remained, and in the intact tombs at Ballana the moisture had completely destroyed the leatherwork and we had only groups of arrow heads stuck together in circular form to prove their existence. The upper part of the quiver illustrated is in the form of a tube and is made of hard leather, while the lower part consists of a bag of soft leather. Size, 41 cms. in length

C

A large shield of leather found in the debris of the tumulus above Tomb 3 at Qustul. It is circular in shape with a "spike" boss in the centre. Two slits on each side of the boss form holes through which a wooden handle was threaded. This shield is embossed with spiral designs. Its striking resemblance to the shields used by the Bega peoples of the Sudan in modern times is of great interest. Size, 70 cms. in diameter.



Α

Wooden toilet flask which was used to contain kohl for darkening the eyelids. It is in the form of a seated sphinx resting on a pedestal with a cavetto cornice. On the head is a heavy wig and fliet, and the eyes are inlaid with ivory. Size, 110 mm. in height. This flask and the one described below were found in the leather bag of the sacrificed girl in Tomb 14 at Qustul.

В

Wooden toilet flask in the form of the god Re, represented as a seated mummiform figure with hands and feet exposed. On the hawk head is a heavy wig surmounted with a cone which is detachable and forms the stopper of the flask. Fragments of kohl were found inside the flask. Size, 101 mm. in length.

C

This comb of ivory was found in the debris of the tumulus above Tomb 3 at Qustul. The floral decoration is painted on both sides in red and brown, Size, 85 mm. in length.

D

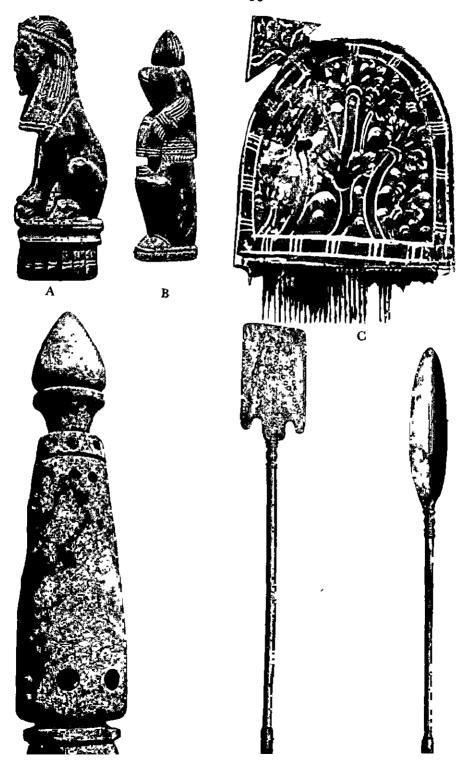
Alabaster ointment flask found in Tomb 2 at Ballana. It is decorated with inlaid circles of blue, black, red and yellow paste, and is 160 mm. in length.

E

Toilet spade of bronze which was found in Tomb 118 at Baliana. The blade is engraved with a geometrical pattern in a series of small circles. The handle is lathe-turned and is soldered to the blade which has been beaten and filed. Size, 14.6 cms. in length.

F

Toilet spoon of silver which was also found in Tomb 118 at Ballana. Size, 14.0 cms. in length. This was a common type and numerous examples in both silver and bronze were discovered in the tombs of Ballana.



A

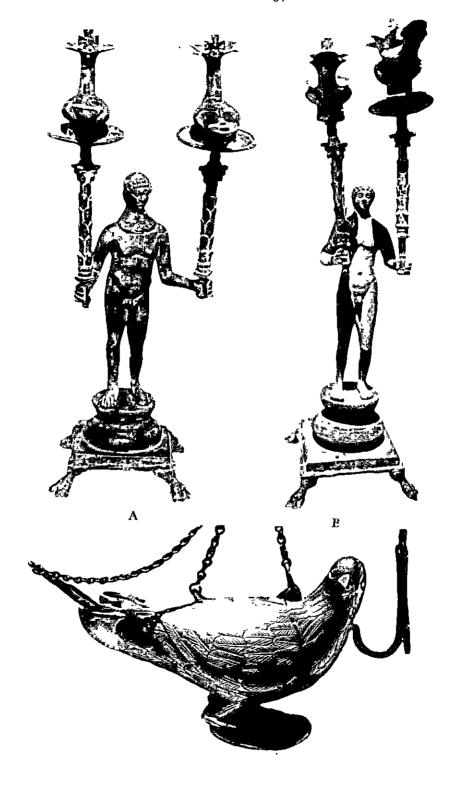
Bronze standard lamp in the form of a nude male figure which was found in Tomb 2 at Ballana. The arms of the figure are extended and each hand holds a column decorated with leaves. Surmounting each column is a circular plate on which rests a lamp in the form of a dolphin, on the tail of which is a Maltese cross; undoubtedly a later addition. The figure is hollow cast and filled with cement, and the feet are soldered to the pedestal which was hollow cast and filed. Each of the lamp columns has a spike at the base, which is socketed through a hole drilled in each hand of the figure, and a spike at the top which passes through the circular plate and is socketed in the lamp. The lamp has a total height of 57 cms.

и

A bronze standard lamp of similar design and construction to that described above. It was found in Tomb 80 at Ballana. It has a total height of 65 cms.

C

Bronze hanging lamp in the form of a dove which was found in Tomb 14 at Qustal. Double burners form the tail, and the oil hole is cut in the back with a hinged triangular lid. Attached to two rings on the back is a suspension chain terminating in a hook, and at the end of a branch chain is a pair of tweezers for trimming the wicks. The lamp has been hollow cast and the details of the feathers, etc., are engraved. Size, 15 cms. in length.



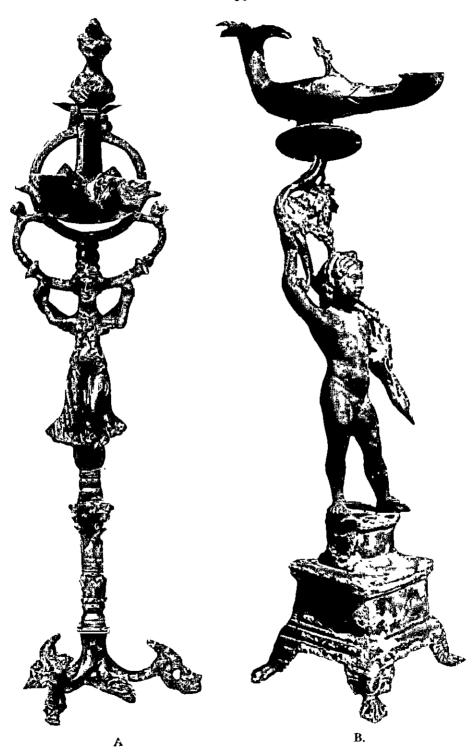
А

Bronze standard iamp which was found with three others of similar design at Tomb 3 in Ballana. It is in the form of a Winged Victory standing on a sphere which rests on an ornate column with three feet separated by human masks. The outstretched arms and wings of the figure support two rampant lions, which hold the ring through which a double-burner lamp in the form of a dolphin is suspended. This dolphin lamp is surmounted by a column on the top of which is the bust of a Bacchante. The lamp has a total height of 59 cms.

В

Bronze standard lamp in the form of the god Eros which was found in Tomb 114 at Ballana. The right arm is upraised holding a vine branch, on the top of which is a circular plate on which rests a dolphin lamp surmounted by a Maltese cross. The figure of the god stands on a cylindrical pedestal which rests on a square base with four claw feet. The lamp has a total height of 53 cms.



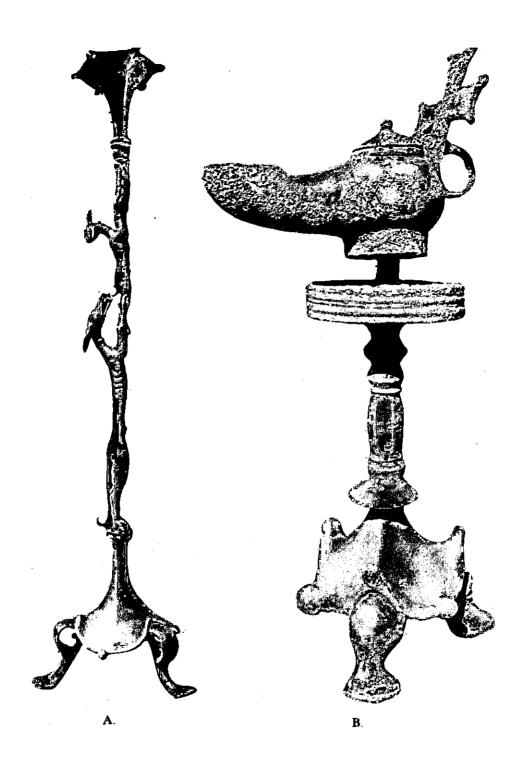


A

Bronze standard lamp found in Tomb 121 at Ballana. The column is in the form of a hound chasing a hare, which it has seized by the tail. At the top of the column is a hexagonal splay-shaped capital with spherical bosses at each corner. The base is also splay-shaped with three legs. Size, 60 cms. in height.

Н

Bronze standard lamp found in Tomb 95 at Ballana. It has a short baluster column with a splay base resting on three legs. Above the column is a circular plate with a wide rim on which rests the lamp. The lamp has a conical-shaped lid over the oil-hole, and a loop-handle, above which is a Maltese cross. Size, 30 cms. in height,



. 🛦

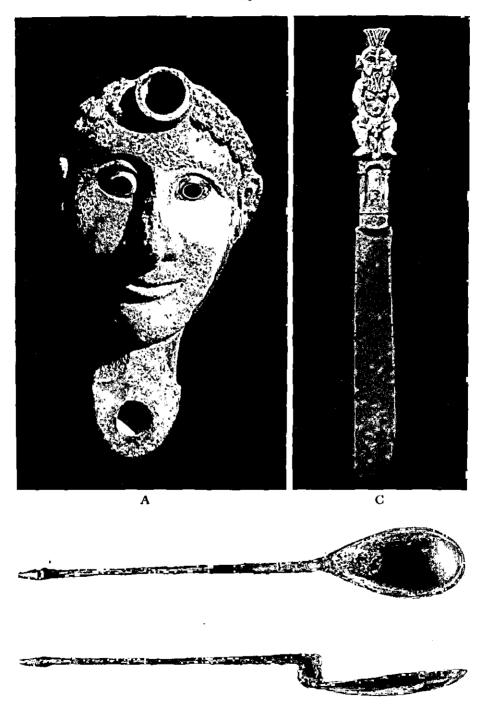
Bronze hand lamp in the form of a male human head which was found in Tomb 3 at Qustul. The oil-hole is at the top of the forehead, and the burner at the base of the neck. The eyes are of garnet set in silver. Size, 15 cms. in length.

В

One of the silver spoons found in Tomb 3 at Ballana. They measure 23 cms. in length.

С

Iron knife with an ivory handle an the form of the god Bes standing on an arched shrine. It was found on the surface above the south side of the pit of Tomb 3 at Qustul. The hollow-ground blade is attached to the handle by a spike penetrating the ivory, which is prevented from splitting by a bronze strip fastened with bronze nails. It measures 25 cms. in length. Other knives of this form with plain horn handles were found at Qustul. It is probable that they were used for eating.



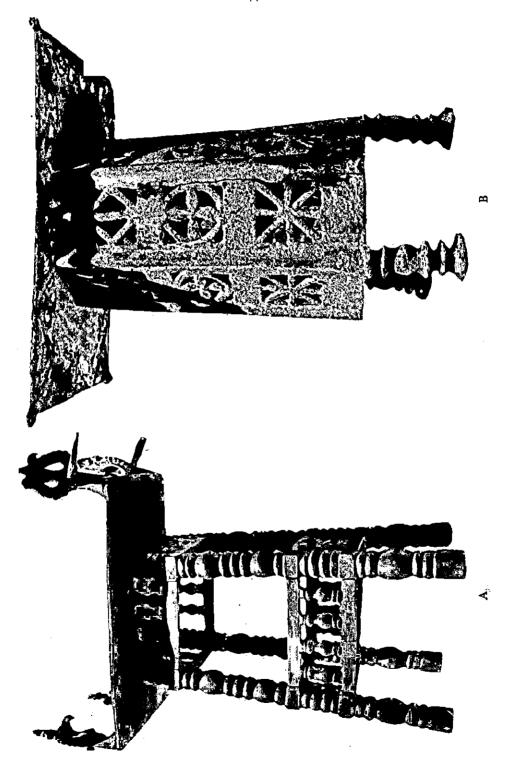
These miniature bronze tables were a common feature in the Ballana tombs, but their exact purpose is unknown.

A

Bronze table in the form of a four-legged pedestal, tapering towards the top, on which rests a flat oblong plate. The plate, which is attached to the legs with rivets, is decorated with a conventional floral pattern, and at each corner is a dove with the wings raised above the head on which rests a cross. The legs of the table are all of the reel-moulded type with cross pieces decorated with small baluster columns. The cross pieces have been cast in a piece and soldered to the legs, which are lathe-turned. The table, which stands 30 cms. in height, was found in Tomb 121 at Ballana.

В

Bronze table in the form of a six-sided pedestal, tapering towards the top, on which rests a flat oblong plate with an open fretwork border. Each of the six sides of the pedestal is decorated with fretwork panels of floral and geometrical design. Three baluster legs have been soldered to the base of the pedestal, which was originally covered with gold leaf, traces of which still remain. The table, which has a total height of 24 cms., was found with two others of similar design in Tomb 80 at Ballana.



Α

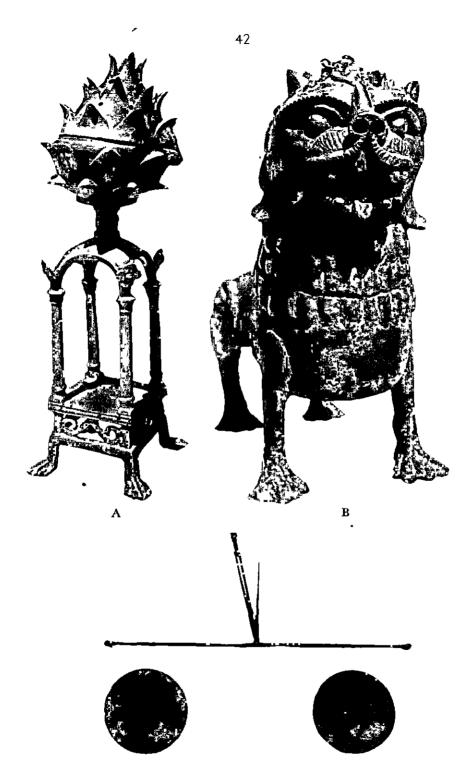
Bronze censer in the form of a shrine surmounted by a pine-cone, which was found in Tomb 121 at Ballana. The shrine consists of a dome supported by four pillars, above the capitals of which are rosettes. The pillars rest on an open fretwork platform with claw-shaped feet. The pine-cone top, in which the incense is burned, is made in two parts, a bowl and perforated lid, which was attached by a hinge and clasp. Size, 25 cms. in height.

F

Bronze censer in the form of a grotesque standing lion, which was found in Tomb 80 at Ballana. The head and neck are detachable, and the incense was placed in the hollow cavity of the body, the fumes escaping through the open mouth and nostrils. Draught holes have been cut in each side of the body. Two rings, one behind the ears and the other over the rump, have a chain for suspension attached to them. Size, 17 cms. in height.

C

Weighing instruments of varying sizes were found at Ballana. They are all of one type; the simple balance in which weight is set against weight at equal distances from the point of suspension. The example shown is a small jeweller's balance of bronze which was found in Tomb 118. It consists of a beam with a spike in the centre which passes between the forked suspension rod, to which it is attached at its base with a revolving pin. Two shallow pans were suspended by cords from the ends of the beam. Size of the beam is 15.5 cms. in length.



A

Bronze folding table stand formed by three legs, rectangular in section. These are connected by three pairs of flat diagonal rods, which are attached to the upper part of the legs by fixed projections, and to the lower part by movable rings which slide up and down. The rods are loosely riveted to the rings and projections, with washers on each side, and are similarly fastened to each other where they intersect. The legs are decorated with a plain moulding surmounted with goats' heads, behind which are projections on which the round table top would rest. All three legs are divided in the centre by loop-handles, decorated with the heads of griffins. This table stand was found in Tomb 80 at Ballana, and another of similar type was discovered in Tomb 6. The example shown measures 98 cms. in length.

В

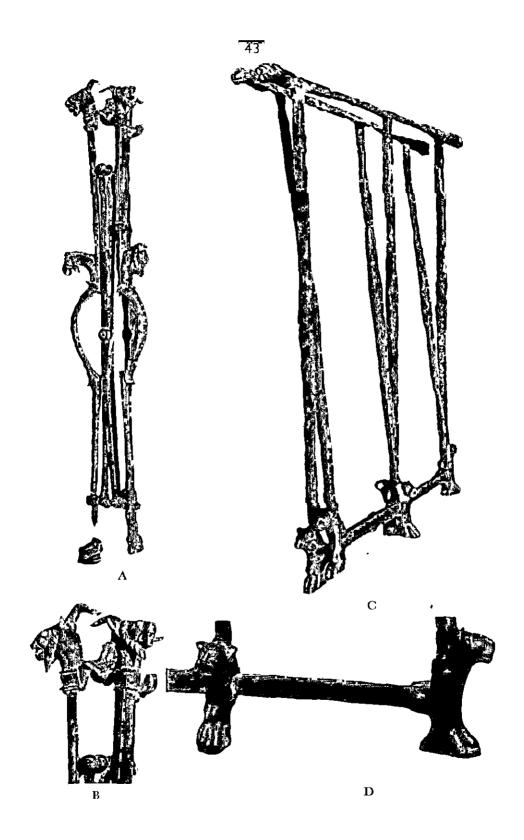
Details of the goats' heads decoration of the table described above.

C

Iron folding chairs, of which this is an example, conform to one type, and are similar in every respect to the modern campstool. The seat was made of either leather or cloth, but unfortunately it is impossible to be certain on this point owing to the decay of the material. The rods at the top of this particular chair are terminated with lions' heads of bronze, and each foot has an attachment, also of bronze, in the form of lions' heads and feet. The chair, which measures 68 cms. in height, we found in Tomb 95 at Ballana.

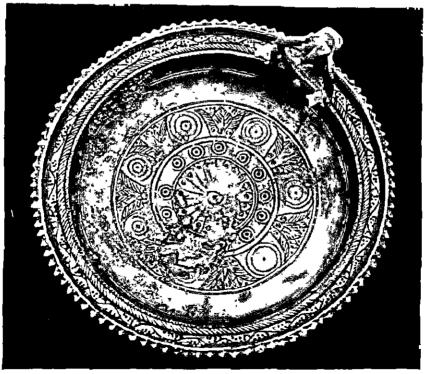
D

Details of the bronze feet of the chair described above.



Bronze bowl found in Tomb 37 at Ballana. The outer rim is decorated with a series of hemispherical bosses, and the top of the rim with a vine and rope design. The inside of the bowl is engraved with an elaborate floral pattern. The base of the pedestal foot is decorated with hemispherical bosses, and the column itself has a floral design in open fretwork. A lion-headed floral handle is attached to the side of the bowl and overhangs the rim. Size, 18.5 ems. in diameter.





A

Bronze toilet flask found in Tomb 118 at Ballana. It is in the form of a bulbous shaped vase with pointed base resting on a tripod. A lid with a twist lock is surmounted with the figure of a dove with upraised wings, supporting a cross which rests on its head. The neck of the flask is decorated with parallel lines in relief, and the body with scallops at the top and bottom. The tripod is in open fretwork with animal heads protruding from two of its sides, and a ring on the third side was probably used to hold a toilet utensil. The flask and tripod stand 25 cms. in height.

В

Bronze amphora and tripod found in Tomb 80 at Ballana. The tripod is decorated or all three sides with open fretwork panels in the form of doves with extended wings. The vessel and tripod together measure 62 cms. in height.

C

This bronze bowl, which was found in Tomb 121 at Ballana, is typical of many found at Ballana. It measures 34.cms. in height.

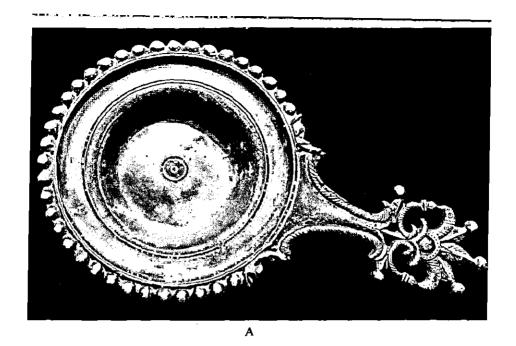


Δ

Bronze patera with handle terminating in a conventional floral design in engraved fretwork. The edge of the handle is decorated with a rope pattern, ending at the base with two dolphins. The edge of the bowl is formed by a series of hemispherical bosses. This patera, which was of a fairly common type, measures 26 cms. in length. It was found in Tomb 37 at Ballana.

В

Bronze brazier found in Tomb 121 at Ballana. Two rectangular hinged handles are fastened below the rim. It stands 29 cms. in height.



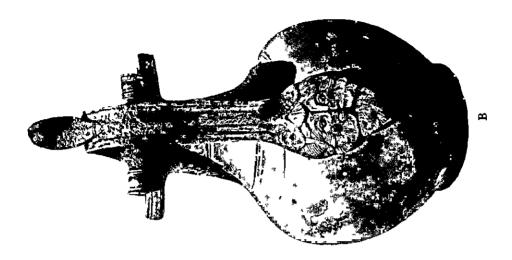


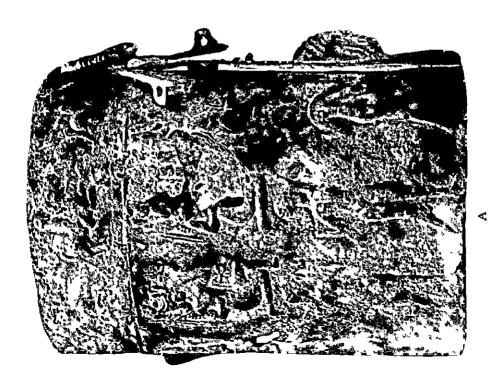
A

Cytindrical bronze casket with single hinge and rectangular lock with two hasps above which form a loop-handle attached to the lid. The sides of the lid are embossed with a series of duplicate figures of a horseman holding a lance, and the sides of the box with two rows of duplicate figures, the upper row representing a kneeling figure of Harpocrates wearing the Double Crown, a flail in his right hand and his left arm upraised with a finger in his mouth. The second row is composed of standing figures of Venus with the right hand holding her hair, and her left a toilet flask. Below the lock is a panel decorated with a human mask in high relief, with eyes inlaid with blue glass, and below it is a figure of a horseman made from the same matrix as the representation on the sides of the lid. The casket, which is 14 cms. in height, was found in the court of Tomb 47 at Ballana.

В

Bronze flagon with trefoil mouth and low foot ring. The shoulders, rim of the mouth and the neck are decorated with engraved parallel lines. The handle has a leaf-shaped thumb-piece and is decorated at the top with a rosette and at the bottom with two female faces, with a lotus flower above them and a fig leaf below. The flagon, which is 22 cms. high, was found in Tomb 121 at Ballana.





Large wooden chest which was found lying on its side with the lid torn off in the debris of the tumulus above Tomb 14 at Qustul. It is evident that its contents had been stolen by the workers who erected the tumulus. The front of the chest is elaborately inlaid with ivory and ebony bosses, and ivory panels painted in black and green. The sides and back have plain panels. The hinges at the back are of iron. Two bronze hasps, terminating in seated lions, are attached to a rectangular bronze lock with a loop handle below it. Owing to the fragile state of the inlay-work it was found impossible to remove the lock in order to examine its working principles, but it is undoubtedly of a "trick" pattern. The chest measures 105 cms. in height.

